





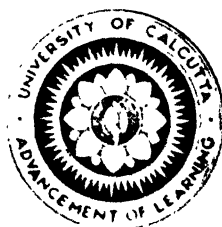


UNIVERSITY QUESTION PAPERS  
1931



**UNIVERSITY OF CALCUTTA**

**UNIVERSITY QUESTION PAPERS  
FOR THE YEAR  
1931**



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Matriculation Examination,  
1931

FIRST PAPER.—PART (A)

[illegible]

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## TRANSLATION FROM BENGALI INTO ENGLISH

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*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate any two of the following passages into English :—

(a) ছুটি ভাই বোন একদিন অপরাহ্নে রাস্তায় খেলা করিতেছিল, 20  
 এমন সময় কিছু দূরে তাহারা অনেক লোকের চীৎকার শুনিতে পাইল।  
 চাহিয়া দেখিল, একটা পাগলা কুকুর তাহাদের দিকে ছুটিয়া আসিতেছে  
 এবং বহুলোক লাঠি লইয়া কুকুরের পিছনে দৌড়াইতেছে। বালক বুঝিতে  
 পারিল, অবিলম্বে কুকুর তাহাদিগকে কামড়াইবে। সে শুনিয়াছিল, পাগলা  
 কুকুরে কামড়াইলে প্রাণের আশা অল্পই থাকে। কিন্তু এই বিশদকালে  
 সে হতবুদ্ধি হইয়া পড়িল না, তাড়াতাড়ি গায়ের জামাটি খুলিয়া তাহার বাম  
 হস্তে জড়াইল এবং ভদ্রীকে ডান হাতে ধরিয়া রাখিল। ছোট বোনটি  
 ভয়ে কাঁদিতে লাগিল। কুকুর তীব্রের মত বেগে ছুটিয়া নিকটে আসিবারাত্র  
 বালক নিজের বাম হাতখানি তাহার দিকে বাড়াইয়া দিল। ইতিমধ্যে  
 লোকজন সেখানে পৌছিয়া কুকুরটাকে মারিয়া ফেলিল।

সকলে বিস্মিত হইয়া বালককে জিজ্ঞাসা করিতে লাগিল, “তুমি পালাও নাই কেন?” বালক বলিল, “হাঁ, আমি দোড়াইয়া পালাইতে পারিতাম বটে, কিন্তু আমার ছোট বোনটি ত আমার সমান ছুটিতে পারিত না, কুকুর নিশ্চয়ই তাহাকে কামড়াইত।”

(b) হাইদার আলির পিতা মহীশূরে একজন সৈনিক ছিলেন। ২০ হাইদারের বয়স তখন ৪ বৎসর তখন তাঁহার পিতার মৃত্যু হয়। হাইদার বড় হইয়া এক সৈন্তদলে প্রবেশ করিলেন। এই যুদ্ধে তাঁহার সাহস ও যুদ্ধ-কৌশল দেখিয়া মহীশূরের প্রধান মন্ত্রী তাহাকে এক ক্ষুদ্র সেনাদলের সেনাপতি করিয়া দিলেন।

হাইদার টাকা দিয়া সৈন্ত বাড়াইতে লাগিলেন, ফরাসী শিক্ষক রাখিয়া সৈন্তদিগকে শিক্ষা দিতে লাগিলেন, এবং কামান, গুলিগোলা, প্রস্তুত করিতে লাগিলেন। এইরূপে তিনি মহীশূরে ক্ষমতাশালী হইয়া উঠিলেন। তখন মহীশূরের রাজা তাহাকে প্রধান সেনাপতি-পদে নিযুক্ত করিলেন। মহীশূর হইতে মারাঠাদিগকে তাড়াইয়া দিয়া হাইদার রাজ্যের মধ্যে সর্ব্বেসর্ব্বী হইয়া উঠিলেন। এই সুযোগে হাইদার রাজাকে বন্দী করিয়া নিজের মহীশূরের স্থলতান হইলেন।

কিছু কাল পরে হাইদার নিজামের সহিত মিলিত হইয়া হৈদেজাদিগকে আক্রমণ করিলেন। হৈদেজেরা তখন বাধ্য হইয়া তাঁহার সহিত সন্ধি করিলেন। বিপদকালে উভয়ে উভয়ের সাহায্য করিবেন এইরূপ স্থির হইল।

(c) কুসঙ্গ সর্ব্বাধা পরিত্যজ্য। কুসঙ্গ বলিতে কেবল কুচরিত্র ২০ ব্যক্তিগণের সহিত মিলন ও আলাপ-ব্যবহার বুঝায় না। কুগ্রন্থ অধ্যয়ন, কুচিত্র দর্শন, কুবাণ্য কি কুসঙ্গীত শ্রবণ, সমস্তই কুসঙ্গের মধ্যে পরিগণিত। যাহা দর্শন করিলে, যাহা শ্রবণ করিলে, যাহা উচ্চারণ করিলে অথবা চিন্তা করিলে মনে কুভাবের উদয় হয়, তাহা সমস্তই বর্জনীয়।

যদি সুগ্রন্থ পড়িলে মন উন্নত হয়, তবে কুগ্রন্থ পড়িলে কেন অবনত হইবে না? যদি সুচিত্র-দর্শনে মনে পবিত্র ভাবের উদয় হয়, তবে কুচিত্র-দর্শনে কেন অপবিত্র ভাবের উদ্ভব হইবে না? যদি সুসঙ্গীত কি সুবাণ্য-শ্রবণে হৃদয় মধুর ভাবে পূর্ণ হয়, তবে কুসঙ্গীত কি কুবাণ্য-শ্রবণে কেন কুংসিতভাবে চিন্তা মলিন হইবে না?

কুসঙ্গ যেমন সর্ব্বনাশক এমন আর কিছু নাই। যে সকল ব্যক্তির অধঃপতন হইয়াছে, জিজ্ঞাসা কর, বোধ হয় প্রায় তাহাদের সকলের মুখেই শুনিতে পাইবে, কুসংসর্গই অধঃপতনের কারণ। মন্দপথে চালাইবার ব্যক্তির অন্ত নাই, স্থপথের সহযাত্রী অতি অর।

## TRANSLATION FROM ASSAMESE INTO ENGLISH

Paper-Setters— { SRIJUT SURYYAKUMAR BHUIYAN, M.A.  
,, AMBIKANATH BORAH, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate into English any two of the following passages :—

(a) শঙ্কৰদেৱৰ জন্ম ১৪৪৮ খৃষ্টাব্দত তেওঁ শিৱোমণি ভূঞা ২০ কুশুম্ভবৰ পুত্ৰ। নগাৱৰ বৰদোৱা এই মহাপুৰুষৰ জন্মস্থান। শঙ্কৰদেৱৰ জন্মৰ অলপদিনৰ পাচতেই তেওঁৰ পিতৃ মাতৃৰ মৃত্যু হয়। শঙ্কৰদেৱক তেওঁৰ বুঢ়ীমাক খেড়মুতীয়ে পতিপাল কৰি ডাঙৰ কৰে। কথিত আছে তেওঁ সকলোৰে পৰা বৰ বলী আৰু ক্ষমতাশালী আছিল। তেওঁৰ কিছু বয়স হোৱাত এদিন ঘাঁড় এটাক শিঙত ধৰি খালত পেলাই দিছিল। আৰু এদিন ভাদ্ৰ মহা ভৰা ব্ৰহ্মপুত্ৰ সাতুৰি পাৰ হৈছিল। শঙ্কৰদেৱৰ শাৰীৰিক শক্তিতকৈ মানসিক ক্ষমতা আৰু প্ৰথৰ আছিল। কথিত আছে যে এঘাৰ বছৰ বয়সলৈ তেওঁ লিখা পঢ়াত হাত দিয়া নাছিল তাৰ পাচত মহেন্দ্ৰ কন্দলী নামৰ ব্ৰাহ্মণ পণ্ডিত এজনৰ পঢ়াশালীত পঢ়ে, অৰু অতি অলপ দিনৰ ভিতৰতে সকলো শস্ত্ৰত পাৰদৰ্শী হয়। শঙ্কৰদেৱে কুৰি বছৰ মান বয়সত বিয়া কৰায়। এটি তেওঁৰ প্ৰথম বিবাহ।

(b) হুগলীত আগামোটাৰেৰ নামে এজন বৰ ধনী মানুহ আছিল। ২০ তেওঁ পাৰশ্বৰ পৰা আহি নিজৰ ধন আৰু পাণ্ডিত্যৰ দ্বাৰা সন্নাট আওৰণ্ডবৰ প্ৰিয় পাত্ৰ হৈ উঠে। সন্নাটে বঙ্গদেশৰ যশোহৰ জিলাত তেওঁক ভালেমান জাগীৰ বা ভূসম্পত্তি দান কৰে। সেই সম্পত্তিৰ পৰা আগামোটাৰেৰ অলপদিনৰ ভিতৰতে এজন বৰ কোটিপতি ধনী হৈ উঠিল। মুচিদ কুলি খা নবাবে হুগলিত এটা মচজিদ বা ইমাম্বাৰ নিৰ্মাণ কৰিছিল, সেইটো সময়ত ভাঙিগল। আগামোটাৰেৰে তাক পুনৰ সংস্কাৰ কৰি তাক এটা সুন্দৰ প্ৰাৰ্থনা স্থান কৰে। বহুদিন নিসন্তান হৈ থকাৰ পাচত বুঢ়া বয়সত আগামোটাৰেৰৰ এজন ছোৱালী হয়, তেওঁৰ নাম মনুজান। মনুজান সাত বছৰ বয়সত আগামোটাৰেৰৰ মৃত্যু হয়। সকলো সম্পত্তি মোটাৰেৰে জীয়েকৰ নামে উইল কৰি দিয়ে। মোটাৰেৰৰ পত্নীয়ে স্বামীৰ মৃত্যুত হাজী ফৈজুল্লাক বিয়া কৰায়। এই বিবাহৰ মাধোন এটি পুত্ৰ সন্তান হয়, তেওঁৰ নাম হাজি মহম্মদ মহম্মিন।

(c) খৃষ্টীয় প্ৰথম শতিকাত কামৰূপত এজন পৰাক্ৰমী ৰজাই ২০ ৰাজত্ব কৰিছিল। তেওঁৰ কন্তাৰ নাম আছিল অমৃতপ্ৰভা। অমৃতপ্ৰভাৰ গুণ আৰু সৌন্দৰ্য্যৰ কথা ভাৱতৰ সকলো ঠাইতে জনাজাত হৈছিল।

তেওঁৰ বিবাহযোগ্য বয়স হ'লত বজাই সন্মতৰ ব্যৱস্থা কৰে। সেই সন্মতৰ সভালৈ সকলো ঠাইৰ পৰা নৃপতি আৰু ৰাজকোৱৰৰ সকল আহিছিল। তাৰ ভিতৰত গোপাদিত্যৰ পুতেক কাশ্মীৰ যুৰাজ মেঘবাহন এজন। এওঁৰ গাত পৰাক্ৰমী বজাহোৱাৰ লক্ষণ দেখা পাই অমৃতপ্ৰভাই তেওঁৰ ডিঙিত মালা অৰ্পন কৰে। মেঘবাহন কাশ্মীৰৰ ৰজা হোৱা কালত অমৃতপ্ৰভা তেওঁৰ বৰ মৰমৰ ৰজমহিষী হয়গৈ। কাশ্মীৰত বৌদ্ধ শিক্ষক নাছিল। সেই দেখি অমৃতপ্ৰভাই কামৰূপৰ পৰা স্তোম্ভ নামে এজন বিখ্যাত বৌদ্ধ পণ্ডিতক কাশ্মীৰলৈ লৈয়ায়। বৌদ্ধ সন্ন্যাসীসকলৰ কাৰণে অমৃতপ্ৰভাই এটি আশ্ৰম বা বিহাৰ সাজি দিয়ে। সেই আশ্ৰম আছিললৈকে “অমৃতভবন” বুলি প্ৰাসিদ্ধ।

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#### TRANSLATION FROM MANIPURI INTO ENGLISH

Paper-Setters— { MR. SANJIBAN NADIA SINGH.  
.. RAJKUMAR ATOMPISAK SINGH.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate any two of the following passages into English:—

(a) তেইন্তুৎসুং সেকেন্দৰ শাহনা অসুম ওইবা অকৌবগী মশক ২০  
ওইবা বা অসি মুংড়াইতবগা লোইননা লোখিদে। অসুম ওইনমক  
গায়ান্দ্দিননা মমা পোক্তবৌগী তোবা ওষা পাঞ্চল খংলুনা অকৌবগা  
লোইননা সোনাৱগা ৰোমদা চেনথে; অসুম লাগী খোমছনা ইফোং ফোংনা  
মেপাগী য়েকুবা শুইনা লেপাথু। মচাগী অসুম ওইবা তোৰিমল খংদবা  
লমচংশিদা অশাওবনা খুম চন্দুনা সেকেন্দৰ শাহনা মচাগী য়েকুবা ওইনা  
লালগী থোংগং তোৱে। মিচং অনিগী লাগী গোৱাল পাড়াগী মনাস্তা  
থেংনৱে।

(b) ইশিং থেক্ হাইছনা মানা পাত্ৰ অহু মচিন্দা থাংজংলকপা ২০  
মতমদা উবা ফংলে মাজদি থুংলাইনা শোকুবা সিপাই অমনা পাত্ৰ অদোমদা  
য়েংছনা লৈরমই। মাগী আৱাবা মিৎয়েং অহু উৱছনা মানা তশেং তশেংনা  
থংলে মাজদি মহাকস্থ খোৱাংবনা য়ান্না বাৱি। মাসি উৱছনা মানা অমুক  
ইশিং থেক্। সিপাই অহুদা য়েংছনা হাইৱকই, “ঐ ডোন্সগী হেয়া  
নংঙোন্দা ইশিং য়ান্না কায়গনি”। অসি হাইৱছনা মানা খুছক অহুদা  
ইশিং অহু মাঙোন্দা থকউ হাইছনা পিয়ে। মাজগী মতুং থৱা লৈৱগা মহাক  
শিথে।

(c) नोखंगी भूमिदा हरिगी मनाना हरि अमल्ल मगी मचिन मनाओ 20  
 शिंदा हाई ; “हयेदि मफम अमदा मेला भोगनि, नखोहैवु मफम अछदा ऐना  
 पुछना चंकनि । मफम अछदा यान्ना हराओ कुंसे भोगनि ऐथोहैना चक्रुना  
 येगनि । भुंथिल पुं अनि तावगी पाड़िना ऐथोहै चंकनि । नखोहै  
 पुंममक थोरां भोहना लैरमउ ।” वा असि तारहना हरिदि यान्ना  
 हराओरे, हाईरकहै “ऐदि मतमचाना थुंनफमदा चक्रुना थुंलुगनि ।” मतुं  
 भूमिकौ अयुक्ता चावा थकना लोहैरवगी तुंला हरिदि अमुक उथिजे,  
 महाक कदोमदा चथोकथे ।

TRANSLATION FROM HINDI INTO ENGLISH.

Paper-Setters— { LALA SITARAM, B.A.  
 Mr. NALINIMOHAN SANYAL, M.A.

Candidates are required to give their answers in their own words  
 as far as practicable.

The figures in the margin indicate full marks.

Translate any two of the following passages into English :—

(a) बड़े कौनसा मनुष्य है जिसने महामतापी राजा महाराजा भोज का 20  
 नाम न मना ही । उसकी महिमा और कौर्ति तो सारे जगत में व्याप रहो है ।  
 बड़े बड़े महिपाल उसका नाम सुनते ही कांप उठते थे और बड़े बड़े भूपति  
 उसके पांव पर अपना सिर गवाते । सेना उसको समुद्र की तरफों का नमूना  
 और खजाना उसका सोने चांदी और रत्नों की खान से दूना । उसके दान  
 ने राजा कर्ण की लोंगों के जो से भुलाया और उसके न्याय ने विक्रम का  
 भी लजाया । कोई उसके राज भर में भूखा न मोता और न कोई उघाड़ा  
 रहने पाता । जो मनु सांगने आता उसे मोती चुर मिलता और जो गजी चाहता  
 उसे मखमल दी जाती ।

(b) इस देश की अन्धिय जाति अपनी बोरता के लिये बड़ा प्रसिद्ध रहो 20  
 है । बोरता के साथ ही साथ देशप्रेम और स्वदेशाभिमान का अपूर्व सम्मेलन  
 होने के कारण, अन्धियों का नाम भारत की इतिहास में अपूर्व गौरव को प्रकाश  
 हो गया है । इस जाति के उत्थान में पुरुषों और स्त्रियों का हाथ समान रूप  
 से ही रहो है । इस जाति में जहां एक से एक बढ़कर वीर पुरुष और  
 अतुर राजनीतिज्ञ हुये हैं वहां अमानिया भी बड़ी बहादुर और नीतिकुशला  
 होती रहो हैं । उस जमाने में आज जैसा परदे का दौरा दौरा नहीं था । आज  
 कल की तरह मा बहिनें घरों के बन्दोखाने में सड़ाई नहा जातो थो । स्वच्छ  
 वायु में स्वतंत्रता से घूमने के कारण उनका शरीर स्वस्थ और सबल होता था ।

(c) दूत के मुँह से पृथ्वीराज का आना सुनते ही परमाल की रानी 20  
 मरुना का गला सूख गया वे अपने मन में सोचने लगीं कि वास्तव में यह

समय बड़ा विकट है। यदि चन्द्रमुखी तालाब पर न जावेगी तो कजलियों की कौन ढंढी करेगा। वहाँ जान से कहाँ उस दृष्ट ने मेरी बेटी का डोला छेड़ दिया तब कौन उसकी रक्षा करेगा। जिनका मुँह पूरी तरह भरोसा था, जो मेरी बेटी के बचाने को, मेरे धर्म की रक्षा करने को अपनी जान पर खेलने को हमेशा तैयार रहने थे वे तो दोनों बर बार यद्वा हैं ही नहीं, अब किस के पास जाऊँ, किस अपनी दुःखकथा कह सुनाऊँ।

रानी इस तरह विचार करता हुई शोकसागर में बार बार गोते खा रही थी उसी समय अभयसिंह और रणजीतसिंह रानी के पास आ गये।

### TRANSLATION FROM MAITHILI INTO ENGLISH

*Paper-Setters*— { Mr. GANGAPATI SINGH, B.A.  
PANDIT BABUA MISRA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate any two of the following passages into English :—

(a) संसारमें अवस्थाएँ परिवर्तन होएष निश्चित और स्वाभाविक अछि। 20  
एकहि अवस्था पर आइ धरि ने को रहल अछि ने रहि सकैत अछि। किछुए दिन पहिने हम जाहि व्यक्तिक दशा अत्यन्त उन्नत ओ प्रशंसनीय देखने की वा सुनने की ओकर दशा आइ एहन शोचनीय भय सकैत छैक जे ओकरा देखि ककरा हृदयमें दयाएँ सञ्चार नहि होएनेक ? तहिना किछु दिन पूर्व जकर अवस्था अत्यन्त शोचनीय देखबामे अद्वैत कल से सम्प्रति अपन उत्साह ओ परिश्रमक प्रभावेँ अत्यन्त अभिमानशाली ओ संसारमें अग्रगण्य भेल देखल जाइछ।

(b) बाल्यावस्थामे कार्यक भार पडलामे महाराज रणजीतसिंहकेँ पदवाक 20  
समय नहि भेटलैन्ह तेँ कृतपात शिवाजी जकाँ इहो निरन्तर छलाह। किन्तु दूरदर्शी तथा विवेकी खूब छलाह। सर्व्व भए बुद्धिमान एहन छलाह जे पैघ २ विधान सभ हिनक बुद्धिकोशल देखि चकित भए जाथि। एक दिन उक्त महाराज भारतवर्षक मानचित्र—नकसा—मे किछु अंश लाल देखि पुछलथिन्ह जे कोनो २ ठाम लाल किएक छैक ? कोनो महामद कहलथिन्ह जे लाल अंश अङ्गरेजक अधीन छैन्ह। ताहि पर महाराज बजलाह जे आव थाइकेँ दिनमे सम्पूर्ण लाल भए जाएत।

(c) आइ कालहुक समयमध्य समकाल संसारमे प्राणिमात्र लौकिक स्वतन्त्रताक 20  
हेतु जाग्रत भेल अछि। सबहिक इच्छा छैक जे हमर वस्त्रमात्र स्वतन्त्र भए जाय। हमरालोकनि सभ व्यावहारिक वस्तु अपनहि देशमध्य प्रसारित कय विदेशी वस्तुक बहिष्कार करी तथा अपन ओ अपना देशक उन्नति करी। जखन सभ अपन



औ आनक भेद करवामे लागल अछि तखन एकवरि हमरालोकनिक उदयमे आशा उत्पन्न भेल जे बहुत संभव थिक जे अब मैथिली लोकनि अपन अति प्राचीन मैथिलीक आरथ कय ओकर उन्नति करवाक प्रयत्न अवश्य करताइ ।

### TRANSLATION FROM NEPALI INTO ENGLISH

*Paper-Setters—* { RAI SAHIB HARIPRASAD PRADHAN, M.A.  
Mr. BODHIKRAM ADHIKARI, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate into English any two of the following passages :—

(a) धान को खेती विशेष गरी तराई मा तथा मध्य जग्गा मा, जहां 20  
प्रचुर पानी पाइन्छ, अग्योरे हुन्छ । अरु अन्न को भन्दा धान को खेती गर्ने रीति बेग्लै हुन्छ । यस का निमित्त गरे गरा परे को जग्गा चाहिन्छ । यस्ता जग्गा लाई खेत भन्दछन् । पहाड का खेत र मध्य का खेत मा धेरै अन्तर हुन्छ । पहाड मा मध्य ठाउँ न हुनाले खेत का गरा हरू थोटा माथी अर्को अर्को माथी अर्को बनाए का हुन्छन् । तर मध्य का खेत का गरा हरू खालि आली ले मात्र क्यारे का हुन्छन् । पहाड का खेत का निमित्त गिर मा पानी का कुलो न भई हुँदैन । पहाड मा जमरो धान को खेती लाग्दछन्, तेस को मंचित बयान यहां गरन्छ ॥

(b) महाराज जङ्गबहादुर को जन्म सन् १८१७ मा भए को हो । महाराज 20  
जङ्गबहादुर का पिता को नाउँ काजी बालनरसिंह हो । उनी बडा धर्मात्मा तथा बहादुर थिए । काजी बालनरसिंह का आठ छोरा र दुई छोरी थिए । धेरै सन्तान हुँदा र राजकाज का कुचक्र मा पर्दा काजी बालनरसिंह ले धेरै धन कमाउँ न सके का थिएनन् । यस कारण प्रतिष्ठित कुल मा जन्म भए को थियो ता पनि महाराज जङ्गबहादुर को बाल्य जीवन दरिद्रतापूर्ण थियो । बालक काल मा महाराज जङ्गबहादुर ले विशेष शिक्षा पनि पाएनन तर छेदी ले प्राप्त पर्ने रबीविद्या मा भने महाराज जङ्गबहादुर प्रवीण थिए औ नाना शस्त्र हरू सरलता पूर्वक संचालन गर्थे ॥

(c) तिस्रो विचकार हरू धार्मिक हुन्छन् । तिनी हरू बृद्धभगवान 20  
को जन्म देखि लिएर मृत्यु सम्म तथा बृद्धभगवान को धर्म पचार आदि कर्म, विच मा प्रकाश गर्दछन् । तिनी हरू विच मा स्व गहिरो रंग भईन्छ । मृत्यु भन्दा पनि अति मृत्यु जिनोष हरू को पनि तिनी हरू विच मा वर्णन गर्दछन् । कपाल का रौंहरू पनि तिनी हरू राखरि भईन्छ । तिनी हरू धेरै जस्तो रेश्मी कुना मा चित्र खिचिन्छन् । तिनी हरू यस्ता चित्र लाई बाइका भन्दछन् । यस्ता बाइका

थारै बुद्धि हरे बड़ी भक्ति गरी, खूब स्थान मा राखेणू भी दिनही यसको पूजा गर्छन्। बुद्धिधर्मावलम्बी हर दिनही गुत्ता मा गई यस्ता चित्र तथा मूर्ति हर को दर्शन गर्छन्, ठोग गर्छन्, पूजा गर्छन्, भी आफू ले गरे को दिन भरि को पापकर्म्म तहां गई स्वीकार गर्छन् भी क्षमा माग्छन् ॥

TRANSLATION FROM MARATHI INTO ENGLISH

Paper-Setters— { PROF. D. R. BHANDARKAR, M.A., PH.D.  
MAHAMAHOPADHYAY PANDIT SITARAM SASTRI.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Translate any two of the following passages :—

(a) अशा स्थितीत कांहीं दिवस गेल्यावर तो कळप एका वाघाच्या नजरस 20 पडला, व त्याने त्याकडे निरखून पाहिले; तो त्याला आश्चर्य वाटले. आपल्याच जातीचा एक भयंकर वाघ त्या कळपांत शेळ्या मेश्या प्रमाणे ओरडत व पाला खात असलेला पाहून तो थकू झाला. इकडे वाघाची चाकल लागताच शेळ्या-मेश्या चाबल्या व पळ लागल्या. त्या पळत असलेल्या पाहून त्यांच्या संवशीचा तो वाघही वेव करीत कांठे तरी लपण्याकरितां जागा शोधू लागला. त्या जंगली वाघाने हा प्रकार पाहतांच इतर कोणही शेळी मेशी कडे न पाहतां एकदम त्या पाल्याकड वाघावरच चाल केली आणि त्याला पकडून तो नेऊ लागला. विचारा पाल्याकड वाघ या गडगवाने चाबून ओरडू लागला व त्याचे पंजातून सुटण्या करितां धडपड करू लागला. जंगली वाघाने त्याला ओढीत एका सरोवराच्या किनाऱ्यावर आणिले आणि आपल्या गर्जनेने त्यास धमकावून धाटले, पहा. पाण्यांत पहा तुझे व माझे तोंड सारखेच आहे. तुझ्यांत व माझ्यांत फरक नाही.

(b) एकदां दस अवधूत एका पाणघल प्रदेशांतून जात असतां एका बऱ्याच 20 मोठ्या तलावांत कांही कोठी मासे धरून तीरावर फेंकीत असल्याचे त्यांनी पाहिले. व त्याच वेळीं फेकलेल्या माशांतून एक बराच मोठा मासा धारीने पोचोत धरून आकाशांत नेताना त्यास दसले. तसेच ती चार मासा घेऊन थोडी दूर जात आहे इतक्यांत शेकडो कावळे शब्द करीत तिच्या मागे लागल्याचे त्यांच्या नजरेस पडले. चार तिकडे जाई तिकडे ते कावळे काव काव शब्द करीत तिच्या पाठलाग करीत, धारीने पुष्कळ रीतिने कावळ्यांस फसविण्याचा प्रयत्न केला, पण त्यात तिचा यश आले नाही. शेवटी इकडून तिकडे तिकडून इकडे धावता धावता तिला न कळत पोचोतील मासा खाली जमिनीवर पडला. तेव्हां कावळ्यांनी पाठलाग करणे सोडून ते त्या माशाकडे बळले, व धावण्याने जात झालेली चार कावळ्यांच्या वासातून सुटल्याने धापा टाकीत निश्चितपणे एका आडा वर बसली. दनानी हा सडे प्रकार पाहून त्याच्या पासून असा बोध घेतला की वासनावर प्राण्यास कधी सुख मिळत नाही.

(c) एकदा अर्जुनास गवे भाला को, ईश्वराचो खरी भक्ति साक्षात्पुन 20  
 टसण्यास नाहो. ओकण्यास ते समजून त्याचा गर्व हरण करण्याचि त्यांनीं योजना.  
 एकेदिवशीं दोघेजण रानांतून भटकत असतां त्यांस एक विलक्षण तड्डिवाईक ५सस  
 भेटला. तो सुके गवत खाऊन आपला निवाह करीत असे. व त्याच्या कमरस  
 नागचो तलवार लटकलिलो असे. अर्जुनाने त्याचा हा विलक्षण प्रकार पाहून त्याच्यान  
 त्यास प्रश्न केलाकों. कांहां! आपण अहंसावाट! तर नाहीं? ज्या अथा हिंसेच  
 गवत माडून वाळके गवतावर निवाह करतां त्या अर्थां आपण आहंसावाट!  
 असावेत असा समज होता व ते तसे असेल तर मीच्या समाधानाचो गोंष्ट आहं.  
 परंतु मग तलवाराचो जहूरो नाहो तो तुमचे कमरला पाहून आश्चर्य वाटते,  
 तरी याचे कारण काय? त्या मनुष्याने अर्जुना कडे पाहून गंभीरपणें बोलाव्यास  
 सुरवात केली. तो ह्मणाला मी चौथा मनुष्यास शिक्षा करण्या कारणां ही तलवार  
 वाळयितो. अकस्मात त्यांचा भेट भालो तर विश्व होऊ नये ह्मणून तलवार  
 मी नेहमीं आपली जवळ ठेवितों.

TRANSLATION FROM ORIYA INTO ENGLISH.

Paper-Setters— { Mr. MADHUSUDAN DAS, B.A.  
 „ PRIYARANJAN SEN, M.A.

Candidates are required to give their answers in their  
 own words as far as practicable.

The figures in the margin indicate full marks.

Translate into English any two of the following passages :

(a) ସେ ସମୟରେ ଆରବମାନଙ୍କର ସାମାଜିକ ଓ ନୈତିକ ଅବନତି 20

ଅତିରମ୍ଭକର ହୋଇ ଥିଲା । ସେମାନେ ସର୍ବଦା ଗୃହବିବାଦରେ ରତ ଥିଲେ ।  
 ଚାରିଆଡ଼େ ଅଗାନ୍ଧି, ପ୍ରଚାରଣା, ଦୟାବୃତ୍ତି ସୁରାପାନ, ବ୍ୟବିଚାର ଓ  
 ନରହତ୍ୟା ପ୍ରଭୃତି ପାପରେ ଆରବଦେଶ ସର୍ବଦା ଜଳଜଳ ଦେଇ ଥିଲା ।  
 ଏପରି ସମୟରେ ସେହି ରମ୍ଭକର ଦେଶରେ ସେହି ଦୂର୍ବୃତ୍ତ ଆରବମାନଙ୍କ  
 ମଧ୍ୟରେ ମହାପୁରୁଷ ମହମ୍ମଦ ଜାତ ହୋଇ ଥିଲେ । “ଇସ୍ଲା ଏକ ଏବଂ  
 ଅବିଚ୍ଛିନ୍ନ, କେବଳ ତାହାଙ୍କର ପୂଜା କର” ଏହି ଘୋଷଣା ମହମ୍ମଦ  
 ବକ୍ତ୍ରମ୍ଭୀର ନାଦରେ ପ୍ରଚାର କଲେ । ସର୍ବାଦୌ ତାଙ୍କର ସହଧର୍ମୀଣୀ  
 ଜ୍ଞାତେକା ଦେବୀ ରସଲ୍ଲା ଧର୍ମ ଗ୍ରହଣ କଲେ । ତ୍ରମେ ତ୍ରମେ ଅନେକ ଗୁଣିଏ  
 ନରନାରୀ ସେହି ଧର୍ମରେ ଦୀକ୍ଷିତ ହେଲେ । ଏହା ଦେଖି ଅବିଶ୍ୱାସୀ  
 ଔହର ସୁଆରିଲାଣୀ ପାଗଣ୍ୟମାନେ ଦ୍ରୋଧାନ୍ନ ହୋଇ ମହମ୍ମଦ ଓ  
 ତାହାଙ୍କ ଶିଷ୍ୟମାନଙ୍କ ଉପରେ ଅତ୍ୟାଚାର କରିବାକୁ ଲାଗିଲେ । ଏହି

ସମୟରେ ମହମ୍ମଦଙ୍କ ସହଧର୍ମିଣୀ ଓ ନ୍ୟେଷ୍ଟ ଗୀତ ଉଭୟ ପରଲୋକ  
ଗମନ କରନ୍ତେ ତାଙ୍କୁ ମହାଶୋକରେ ପଡ଼ିବାକୁ ହୋଇ ଥିଲା । ଏହି  
ଦାରୁଣ ଅଭ୍ୟାଚାର ଓ ମହାଶୋକ ସମୟରେ ସୁଦ୍ଧା ସେ ଜଣେ ଶିଷ୍ୟକୁ  
ଧର୍ମପ୍ରଚାର ଲାଗି ମଦିନା ନଗରୀକୁ ପ୍ରେରଣ କଲେ । ସୌରାଷ୍ଟ୍ର ଦ୍ରମେ  
ସେ ସ୍ଥାନର ପ୍ରଧାନପ୍ରଧାନ ଲୋକେ ତାଙ୍କ ଧର୍ମ ଗ୍ରନ୍ଥଣ କରି ତାଙ୍କୁ  
ସେଠାକୁ ଆଣିବା ପାଇଁ ୭୦ ଜଣ ଶିଷ୍ୟଙ୍କୁ ମନ୍ତ୍ରା ନଗରକୁ ପଠାଇଲେ ।

(b) ରାଉତବର୍ଷର ଅନେକ ଯାଗାରେ ପ୍ରଚୁର ବର୍ଷା ହୁଏ ଏବଂ ୨୦  
ନଦୀର ଜଳ କୁଳ ଲକ୍ଷି ଚାଲିଯାଏ । ଗରିବ ଲୋକେ ଏବଂ ଅନ୍ୟାନ୍ୟ  
ଯେଉଁ ଲୋକମାନେ ବାଧ୍ୟ ହୋଇ ଏହି ସବୁ ନିଲାରେ ବାସ କରନ୍ତି  
ସେମାନଙ୍କର ଗୃହ ଦୃଢ଼ିତା ଉପାୟରେ ଉଚ୍ଚ କରାଯାଇ ଥିବା ସ୍ଥାନମାନଙ୍କରେ  
ନିର୍ମିତ ହୁଏ ଏବଂ ବର୍ଷା ଦିନରେ ସେହି ଗୃହଗୁଡ଼ିକର ଚାରି ପାଖପାଖ  
ଜଳ ଯୋରି ଥାଏ । ଏପ୍ରକାର ସ୍ଥାନସବୁ ଅସ୍ପଷ୍ଟ୍ୟକର ଏବଂ ବାସଗୃହର  
ଉପଯୋଗୀ ନୁହେଁ । ଯେଉଁ ଉଚ୍ଚ ରୂମ୍ବରୁ ଜଳ ଗୀଞ୍ଜ ବହି ଚାଲି ଯାଏ  
ତାହା ବାସଗୃହପଥେ ସର୍ବାପେକ୍ଷା ଉତ୍ତମ । କଙ୍କର, ବାଲୁକା, ବାଲୁକାମୟ  
ପ୍ରସ୍ତର ଏହି ସମସ୍ତ ଦ୍ଵାରା ଯେଉଁ ରୂମ୍ବ ଗଠିତ ତାହା ଏବଂ ପର୍ବତମୟ ସ୍ଥାନ  
ବାସଗୃହର ଉପଯୁକ୍ତ । ପଙ୍କୟୁକ୍ତ ରୂମ୍ବ ଉତ୍ତମ ନୁହେଁ, କାରଣ ତାହାର ମଧ୍ୟ  
ଦେଇ ଜଳ ଅପ୍ରତିହତ ରାବରେ ଗତି ଯାଇ ପାରେ ନାହିଁ । ଏପ୍ରକାର  
ରୂମ୍ବ ଉପରେ ଜଳ ଜମା ହୋଇ ରହି ରୂମ୍ବକୁ ସନ୍ତସନ୍ତୀତ କରେ ।  
ପଙ୍କମୟ ରୂମ୍ବ ଉପରେ ବାସ କରୁ ଥିବା ଲୋକେ ବାତ, କୃର  
ବନ୍ଧୁକର ରୋଗ ଏବଂ ଅନ୍ୟାନ୍ୟ ଅନେକ ରୋଗରେ ପୀଡ଼ିତ ହୁଅନ୍ତି ।  
ଯେଉଁ ରୂମ୍ବ ଫସ୍ତୁ ଏବଂ ସହିତ ତାହା ମଧ୍ୟ ବାସ ପଥେ ନିରାପଦ

ହୁଏ । ତୁମ ବିମ୍ବ ଅନ୍ୟାନ୍ୟ ଜଳାମୟ ମଧ୍ୟରେ ସହିତ ମୁହିଁବା ଦେଇ  
ଭୂଷିତ ପଦାର୍ଥ ପ୍ରବେଶ କରିବାର ରସ ସର୍ବଦା ଥାଏ । ଯେଉଁଠାରେ  
ଦମୟନ୍ତରୁ ଅଳ୍ପ ଗରୀର କୃପ ଖୋଲିଲେ ଜଳମିଳେ ସେ ସ୍ଥାନ ମଧ୍ୟ  
ବାସଗୃହର ଉପଯୁକ୍ତ ହୁଏ ।

(୧) ପ୍ରଗାଢ଼ ଅନ୍ଧକାର, ରାତି ଦୁଇପ୍ରହରରୁ ଗଢିଲାଣି । ହିଁସି ହିଁସି <sup>20</sup>  
ବର୍ଷା ହେଉ ଅଛି, ଏମନ୍ତ ସମୟରେ ଦୁଇକଣ ଦୃଷ୍ଟିଦାୟ ଶୁଣାବୁଦି  
ପୁରୁଷ ସହରର ପ୍ରାକୃଷ୍ଟି ଏକ ସାହେବର ଗୃହିରିତରେ ପ୍ରବେଶ କଲେ ।  
ଗୃହସ୍ଥାନୀ ଜଣେ ନାମଯାଦା ଡାକ୍ତର, ତାଙ୍କ ଘରେ ଅନେକ ଟାଙ୍କିକ  
ଉଡି ଅଛି ବୋଲି ଆଗପାଗରେ ଥିବା ସମସ୍ତେ ଜାଣନ୍ତି । ଗରୀର  
ନିମୀଥକାଳରେ ବାହାର ଘରର ଗୋଟିଏ ହରକା ରାନ୍ଧି ଉପରୋକ୍ତ  
ଦୁଇବ୍ୟକ୍ତି ଉକ୍ତ ଗୃହ ମଧ୍ୟରେ ପ୍ରବେଶ କରି ଥିଲେ । ଡାକ୍ତର ସାହେବଙ୍କ  
ଘରୁ ବିଛି ଚୋରି କରି ନେବା ସେମାନଙ୍କର ଉଚ୍ଚା ଥିଲା ।

ଯେଉଁ ଘରେ ଡାକ୍ତର ସାହେବ ରୋଗୀ ପରୀକ୍ଷା କରନ୍ତି ପ୍ରଥମେ  
ସେହି ଘରେ ପଶି 'ଚୋର ଦୁହେଁ ଦେଖିଲେ ଯେ ସେମାନଙ୍କ ସମ୍ମୁଖରେ  
ଗୋଟିଏ ବଡ଼ ସିନ୍ଦୂର ରହି ଅଛି । ଜଣେ ଚୋର ପ୍ରଥମେ ସେହି  
ସିନ୍ଦୂରକୁ ରାନ୍ଧି ଦେଖିଲା ଯେ ଚିହିଁରେ ଅନେକ ଲୁଗାପଟା ଅଛି । ସେ  
ସେଗୁଡ଼ିକ ଆବୁସାରି କରିବାକୁ ଲାଗିଲା । ଅନ୍ୟଜଣ ଡାକ୍ତରଙ୍କ  
ଗବ୍ୟବହେଦ ଗୃହରେ ପ୍ରବେଶ କଲା । ଅନ୍ଧକାରରେ ଅଣ୍ଟା ଦିହେଇଁ,  
ତାହାର ହାତ ଦେବାକୁ ଏପରି ଏକ ସ୍ଥାନରେ ଲାଗି ଗଲା ଯେ  
ସେସ୍ଥାନରେ ଥିବା ନରକଙ୍କାଳ ମୁଖବ୍ୟାପୀ କରି ହାତକୁ ସାଙ୍ଗାତିକ  
ରାବରେ କାମଡି ଧରିଲା । ଯାତନାରେ ସେ ରଡ଼ିଛାଡ଼ିବାକୁ ଆଗମ୍ଭ

କଲା । ସେହି ରଢ଼ି ଗୁଣ ଅନ୍ୟ ଚୋରଟି ଲୁଗାପଟା ସବୁ ଛାଡ଼ି ରଙ୍ଗା  
ହରକା ମଧ୍ୟ ଦେଇ ବାହାରକୁ ଯାଇଲା । ଗୃହସ୍ଥମୀ ଓ ପ୍ରତିବେଶୀ  
ସମସ୍ତ ଜାଗ୍ରତ ହୋଇ ଆସି ଦେଖନ୍ତି ଯେ ଗୋଟିଏ ନରକଙ୍କାଲର  
ମୁଣ୍ଡ ମଧ୍ୟରେ ଏକ ସ୍ତ୍ରୀ ଲାଗି ଥିବାରୁ ତାହାର ମୁହଁ ହାଁ ହୋଇ ଥିଲା ।  
ଦେବାଇ ଚୋର ହାତବାର୍ଦ୍ଧ ସ୍ତ୍ରୀ ଜାଣି ଯାଇ ହାତକୁ କୋର ପୂର୍ବକ  
କାମୁଡ଼ି ଧରି ଅଛି ।

TRANSLATION FROM GUJARATI INTO ENGLISH.

Paper-Setters— { DR. I. J. S. TARAPOREWALA, B.A., PH.D.  
PANDIT HARGOBIND DASS SETH.

Candidates are required to give their answers in their  
own words as far as practicable.

The figures in the margin indicate full marks.

Translate into English two of the following passages :—

(a) କାଠି ମାୟାସ ଶିଖଣ୍ଡା, ଶୁଣା, ଶଙ୍ଖଡ଼ା, କାଣ୍ଡା କେ ଆନ୍ଧାଣା ହୋଇ, ମୁଖ 20  
ହୋଇ କେ ଉଡ଼େରା ହୋଇ, ତେମାଁ ତେନା ଶା ହୋଇ ? ଆପଣା ଅବଧାନ ନା କରନାର  
ତା ଇନ୍ଦ୍ରିୟ ଉ. ଐମାଁ ଆପଣା କର୍ତ୍ତ ଅବଧାନ ନାହିଁ । ଉଭେ ଜେମାଁ ଜେନୁଁ ଅବଧାନ  
ନାହିଁ । ତେମାଁ ତେନା ହୋଇ କାଠିନେ ତେନେ ଉଡ଼ି କାଠିନେ, ତୋ ଅନ୍ୟାୟ କାଣ୍ଡା  
କାଣ୍ଡାୟ । ତମେ ସଜ୍ଜା ବିଚାର କରଣା ତୋ ଜଣାଣେ କେ ଆପଣା ତେମ କରବାନେ  
କର୍ତ୍ତ ଉକ୍ତ ନାହିଁ । ଶରୀରନୀ ରକ୍ତା, ରୂପ, ରଙ୍ଗ ଗୁଣ ଐସାଁ ପ୍ରଭୁ ଆସେ ଉ. ଐଥା  
ତେ ମାଟେ ତୋ କାଠି ମଲକ କରେ ତୋ ତେ ଇନ୍ଦ୍ରିୟନୀ ମଲକ କର୍ତ୍ତା ଜେନୁଁ କରେ ଉ ; ପଣ୍ଡା  
ଜେ ବାତମାଁ ଆପଣା ଅବଧାନ ଉ ଓନେ ତେମାଁ ଜେ କର୍ତ୍ତ ହୋଇ ହୋଇ, ତୋ ଆପଣା  
ଶରମାତୁଁ ଜେଉଁନେ, ଓନେ ତେ ଆମାଁ ହୁର କରବାନୀ କାଶିଶ କରବୀ ଜେଉଁନେ ।

(b) ହିନ୍ଦୀ ଉକ୍ତ ପଶ୍ଚିମେ ଅରବୀ ସମୁଦ୍ରନା ଦିନାରା ପର ଆବେଶା ସୋମ- 20  
ନାଥ ପଟ୍ଟାମାଁ ମହାଦେବନୁଁ ଐକ ପ୍ରାୟାତ ଦେଉଁ ଉକ୍ତ ତେମାଁ ପୁଷ୍ପକ ଶ୍ରୀ ଉକ୍ତ, ଐ  
ମନ୍ଦିରମାଁ ଐକ ମୋଟୀ ମୂର୍ତ୍ତି ଅନ୍ଧାରା ଗଜାରାମାଁ ଉକ୍ତ । ଯାଁ ସୋନାନାଁ ରତ୍ନଜିତ  
କାଠିଆମାଁ ଶିବା ସଜାବତା । ଉକ୍ତ ଶୈଳ୍ୟମାଁ ସୋନାନା ଓନେ ରତ୍ନାନା ମୋଟା  
ବାଞ୍ଚାର ବାଣେଶା ଉକ୍ତ । ଦରବାଳ କମାଡ଼ ମୁଖତା ଶାଢ଼ୀନାଁ ଉନାବେଶା ଉକ୍ତ । ଐକ  
ଉକ୍ତ ଆଶ୍ଚର୍ଯ୍ୟ ସଭାମଣ୍ଡପମାଁ ଐସାଁ ପୂଜନ କରତା, ଓନେ ଦରବାଳ ଆଗଣ ୩୫୦  
ନଟା ନୃତ୍ୟ କରତା । ହିନ୍ଦୁସ୍ତାନନା ତମାମ ଶାସ୍ତ୍ରମାଁ ଲଗାଣୁ ଐକ ଦେଉଁ ଜେବାନେ  
ତଥା ମୂର୍ତ୍ତିନେ ଶାସ୍ତ୍ର ସମାବଦାନେ ଆବତା । ସୋମନାଥନୀ ଶାସ୍ତ୍ରୀ ମହାମୁଦ୍ରା ଶାସ୍ତ୍ର-  
ବାମାଁ ଆନୀ ଯାହା ତେଣୁ ତେ ଦେବଣ ପର ଉକ୍ତ କରି ମୂର୍ତ୍ତିନୁଁ ଉକ୍ତ କରବାନୁଁ ପଣ୍ଡା  
ଶାସ୍ତ୍ର ।

(c) पादशाह अकबर एक वेला वेश भट्टीने नगर थर्चा जेवाने 20 नीकज्या. थोडके छे ते जथो अठले एक पुरुष लोकोने धर्मोपदेश करतो तेना जेवामां आल्या. पादशाहते हेकाळे उलो रलो. पेला पुरुषन जालतो अठकावी वयमां एक धरडा भाळुरे पूछकं, “मोलवी साहेब, आपने कोळे पेदा कर्था?” ते उसा पासे एक नानो छोकरो उलो हुतो तेने जतावीने मोलवीअे कल्लु के “आ छोकरो पल्लु पोताना पेदा करनारने जल्ले छे, पल्लु जल्लतो नथी!” उसे जवाज दीघो, “साहेब, अने आन्याने पांच सात वरस थयां छे तेथी ते पोताना पेदा करनारने जोणजे, पल्लुकुं अढीआं साठ वरसनो आवेलो तोमने असलनी वात केम याद रहे?”

#### TRANSLATION FROM URDU INTO ENGLISH

Paper-Setters— { KHAN SAHIB REZA ALI WAHSHAT.  
MAULVI MD. ISHAQ. M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate into English any **two** of the following extracts :—

A.

20

ولایت میں پہلے یہ قاعدہ تھا کہ سرکار شریف خاندانوں کے لڑکوں کو اپنے خرچ سے بڑھا لکھا کر ہندوستان کی نوکریوں کے واسطے تیار کرتی تھی۔ ان دنوں جو انگریز ہندوستان آتے تھے سب خاندانی ہوتے تھے۔ اب چند سال سے سرکار نے اس دستور کو موقوف کر کے امتحان کا طریقہ جاری کیا ہے۔ لوگ اپنے طور پر ہندوستان کی نوکری کے لئے لیاقت بہم پہنچا کر امتحان دیتے ہیں۔ جو امتحان پاس کرتے ہیں انکو نوکری ملجاتی ہے۔ دھوبی حجام مریچی وغیرہ پیشدوروں کے لڑکے جنکی ولایت میں کچھ عزت نہیں محنت کر کے امتحان پاس کر لیتے ہیں \*

B.

20

اتنے میں ایک شخص نے میرے پاس آکر کہا اسی مسجد میں توجا کر بیٹھ شاید تیرا مطلب اس جگہ پرائے اور تو اپنے دل کی

مراد پائے - میں اُٹھ کر اُس مسجد میں جا رہا لیکن آنکھیں دروازے کی طرف لگ رہی تھیں کہ دیکھے پردہ غیب سے کیا ظاہر ہوتا ہے ؟ تمام دن جیسے روزہ دار شام ہونے کا منتظر رہتا ہے میں نے بھی وہ روز رسی ہی بیقراری میں کاٹا - جب شام ہوئی تو وہ شخص مسجد میں آیا اور میرا ہاتھ پکڑ کر اپنے ساتھ لیچلا - پھر ایک باغیچہ میں لیجا کر مجھے بٹھایا اور کہا یہاں رہو جب تک تمہاری آرزو برائے - میں اُس باغ کے پھولوں کی بہار اور چاندنی کا عالم اور حوض میں فواروں کے اچھلنے کا تماشا دیکھ رہا تھا \*

C.

20

ایران میں رسم ہے کہ شروع بہار میں ایک عید کیجاتی ہے - ملک بھر میں نہایت خوشی و خرمی ہوتی ہے - شاہ ایران اُمرائے سلطنت کو خلعت و انعام حسب مدارج عطا کرتے ہیں - نادر نے اس موقع پر شاہان ایران سے زیادہ شان و شوکت دکھلائی اور عارضی طور پر ایک نہایت عمدہ اور نفیس عمارت تیار کرائی جس میں عیش و عشرت کے جملہ لوازم نہایت فراخ دلی سے مہیا کئے - اختتام عید پر جملہ سرداران فوج اور اراکین سلطنت کے زورور تقریر کی کہ شاہی خاندان کے شاہزادے یہاں موجود ہیں - تم لوگ جسکو پسند کرو بادشاہ بنا لو - مجمع جو کرنا تھا میں کر چکا \*

#### TRANSLATION FROM PERSIAN INTO ENGLISH

Paper-Setter—AGA MD. KAZIM SHIRAZI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate any two of the following passages into English :—

A.

20

صدر اعظم آمدہ عرض کرد کہ وزیر ہند معطل است میخواستہ اجزای خود را معرفی کند و اہالی شہرہائے انگلیس ہم عریضہ تہنیت زورور آورده میخواستہ بخوانند - رفتیم توی تالار وکلای شہرہای بزرگ



انگلیس آمده نطق تهنیت ورود را عرض کردند - بعد وزیر هند اجزای خود را معرفی کرد - پس از آن سوار کالسکه شده رفتیم براه آهن - ملنزمین همراه بودند - سوار شده رفتیم به ویندزر - قصر بسیار بزرگی است - در حقیقت قلعه سختی میباشد - از قدیم با سنگ ساخته اند - روی تپه واقع است دم پله قصر پیاده شدیم - بادشاه تا بای پله به پذیرائی آمدند - بایشان دست داده رفتیم بالا - قدیمی مکت کرده بعد با ولیعهد انگلیس آمده سوار اسپ شدیم - صاحب منصبان انگلیس با یکدسته سواره نظام همه جلو افتادند - از خیابان طولی جلو عمارت راندم برای آخر خیابان که اینجا وسعت گاه میدان مشق است - یک فرسنگ درست راه بود - طرفین راه از دهام بطوری بود که مجال عبور نمیداد و مردم متصل هورا می کشیدند بطوریکه از صدای آنها اسپها رم میکردند و دیوانگی مینمودند \*

B.

26

سکینه خانم میگوید - آقا سلمان خودتان میدانید که هفت ماه قبل از ربائی تمام مردم گریخته متفرق شده بودند حاجی نفور مرد با توکلی بود میگفت من جائی نخواهم رفت اما برای احتیاط شصت هزار تومان پول موجود میان صندوقها با ثبوت و شاهد برد بخانه حاکم شرع سپرد که اگر احياناً بمیرم بعد بوارث سرحمی من بده - حاکم شرع همان مبلغ را بر داشته مثل سایر مردم از شهر بیرون رفت - من و برادرم با یک زن صیغه در خانه ماندیم اتفاقاً برادرم ناخوش شد - کسی هم در شهر نبود مگر یکدسته سرباز از جانب دیوان گذاشته بودند خانهای مردم را محافظت کنند مرده ها را بقبرستان ببرند - آن روز چهار تا سرباز خانه ما آمدند برادرم بانها گفت من می میرم غیر از این همشیره ام در دنیا وارثی ندارم - این را گفت و برحمت خدا رفت - حالا زن برادرم که صیغه است و هیچ ارث بار نمیرسد میخواهد وارث برادرم شود - با من بمرافعه را ایستد توقع دارم درین خصوص از جانب من وکیل باش \*

در زمان ناصر الدین شاه شهر طهران وسعت و عمران زیاد پیدا کرد و روز بروز بر آبادی می افزود عمارت سلطنتی متعدد در نقاط مختلفه بنا کرد - مدرسه دار الفنون یکی از بناهای او میباشد و در عهد همین شاهنشاه بعضی صنایع و اختراعات جدید از تلگراف و تلفن و بلور سازی و راه های شوسه و غیره در ایران معمول گردید اگرچه مردم در عهد او براحت بودند لیکن از طرف دیگر مانع ترقی مملکت و ملت بود نمیگذاشت بهیچوجه بری فضل و علم حقیقی بدمانگ کسی برسد و مملکت بطوری در فشار استبداد بود که هیچ کس جرأت نفس کشیدن نداشت ناصر الدین شاه در سنه ۱۲۸۸ میرزا حسین خان را صدارت داد این مرد با دانش وضع و ترتیب دربار را بکلی تغییر داده با اصول فرنگ ادارات دولتی را نهاد و در دفع ظلم و تعدی کوشش زیاد داشت و رسم رشوه و تعارف موقوف نمود \*

TRANSLATION FROM SINHALESE INTO ENGLISH.

Paper-Setter—REV. SAUGATA SUGATAKANTI.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Translate any two of the following :—

(a) එක් සමයෙහි අප බෝසතාණෝ බරණැස් 20  
නුවර බරණැස් රජුන් පිණිස බරණැස් රාජ්‍යයෙන්  
කුසා පිළිසිද ගත්ත. ඔවුන් විසින් එම කුමරාගට බඹ  
දත් යයි නම් තබන ලදි. කුමාරතෙමේ වර්ධනය  
වෙමින් සුදුසු ශාස්ත්‍රයන් ඉගෙනගත්තේය. කුමාරයා  
පියරජතුමන් ඇවෑමෙන් රජකමට පත් විය. ඔහු ඉතා  
හොඳ ගතිගුණ ඇති ඉතා කරුණාවන් නුවණැති  
කර්තව්‍ය පරායණ රජෙක් විය. එනිසා එතුමාගේ  
මනුෂ්‍යමනසලයද රජතුමා වීමෙන් යහපත් ගතිගුණ  
ඇති විය. තොබෝ දම නඩුශාලාවෝ නඩුනැති  
බැවින් හිස් වූහ.

ඉක්බිති බොධිසත්වතෙමේ මෙසේ කල්පනා කළේය.  
"සියළු විනිශ්චයශාලාවෝ නඩු නැති බැවින් හිස් වූහ.  
මගේ පුරා තොමො ඉතා සැපයේ කාලය යවයි. දන්  
ඉතින් මාතුල යමක් දෙය් තිබේ නම් එය බැලීම සහ  
ඒවායෙන් ඔදිමට ලක්සාග කරන්ට ඔනා" යි.

(b) බොඩිසත්වතෙමේ කරුණුවෙන් මෙසේ කීහ-" 20

සුඡන්ත තෙමේ මුණුප්පයෙක්සය මම නම් නිරුසනය. සුඡන්ත තෙමේව යමක් ගිරිහර පිඩාව හැටියට වැටගේ ද එද මට ගිරිහර පිඩා නොවෙත්ව පුළුවනි. මුණුප්පයක්ගේ ජීවත්ව ඉන්ට එක්තරා ක්‍රමයක් තිබේ. එසේම නිරුසන් ගතික සත්ත්වයන්ට ද වෙන ක්‍රමයක් ජීවත්ව ඉන්ට ඇත කරුණු. මෙසේ බැවින් මට සුඡන්ත සත්ත්වයන්ට බැහැ. එ කෙසේ වෙතත් සුඡන්ත තෙමේ මාව සතුටු කරන්ට කැමිනි නම් මීට පසු කැලඳ ඉන්ත අශරණ සතුන්ට හිංසා කරන්ට එපා. එ මන්ද කිය නොත් ඔවුන් ජීවත්ව සිටිත්ට සතුටුයි. ඔවුන් මැරෙත්ට බයයි.

(c) මෙහි ඉපිපතන නම්වූ මිගදාව වනයෙහි නවා 20

ගනයන් වහන්සේ විසින් බමුවනුසුප්පය දෙශනා කොට වදාරණ ලදි. එද ඉතා ශාන්තවූ සුඛය එලවන්නාවූ සවසකාලය විය. මඤ්ඤමාරුත හටන්ට පටන් ගත්තේය. තාරකා අහස්හි බැබළුණ. සුභගක්කියෙන් මුළු වානය සුගන්ධිත විය. බුදු බණ ඇසීමට සියළු දෙවතාවෝ සහ කුඩා ලොකු සියළු සත්ත්වයෝ එහාට පැමිණියහ. නවාගනයන් විසින් දෙශනා පාළියෙන් කරණ ලදි නමුත් පඤ්චවග්ගය හිසුන් මෙන් සියළු සත්ත්වයෝ එම බමිය ගොදින් අවබෝධ කළහ.



TRANSLATION FROM BURMESE INTO ENGLISH.

Paper-Setters—{ MAUNG WE LIN.  
MAUNG BA, B.L.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate any two of the following passages into English.—

40

(a) ထိုကာလ၌ကားမိဘတို့အရိုအသေလုပ်ကျွေးခြင်း၊ သူတပါးတို့အား ချစ်ခင်သနားခြင်း၊ အလှူပေးခြင်း၊ သီလဆောက်တည်ခြင်းစသည်တို့နှင့် ပြည့်စုံသောယောက်ျားမြတ်တို့ကို မဟာသမုဒ္ဒရာ၌ နှစ်မွန်း၌မသေစေလင့်ဟု စတုလောကပါလနတ်မင်းကြီးလေးယောက်တို့က မဏိမေဓလာမည့်သော နတ်သမီးအား ထိုနှစ်မွန်းသောသူတို့ကို ဆယ်တင်စီမ့်သောငှါ သမုဒ္ဒရာ၌ အစောင့်ထားကြသတည်း။ ထိုဘုရားလောင်းနှစ်တော်မူသော ခုနစ်ရက်တွင်း၌ကား မဏိမေဓလာနတ်သမီးသည် မိခင်ဘုံမာန်၌ နတ်၏စည်းစိမ်ကို စံစားခြင်းဖြင့် မေ့လျော့၍ သမုဒ္ဒရာမှာ မည်သို့ဖြစ်လိမ့်အံ့နည်းဟု မကြည့်မဆင်ခြင်မိဖြစ်၏။ ခုနစ်ရက်မြောက်သောနေ့မှ သတိရ၍ ငါကား သမုဒ္ဒရာကို မကြည့်မိသည် ယနေ့ခုနစ်ရက်ရှိပြီ။ အကြောင်း အသို့နည်းဟု သမုဒ္ဒရာကို ရှုကြည့် ဆင်ခြင်လေသော်၊ ရွှေဘုံးကဲ့သို့ တပြောင်းပြန်ပြန် ကူးသော ဘုရားလောင်းကိုမြင်လျှင် မိခင်လာပြည့်ရှင်သားဖြစ်သော ဤမဟာဇနကသဘိုသားသည် အကယ်၍ မဟာသမုဒ္ဒရာ၌ နှစ်မွန်း၍ ဆုံးချေအံ့။ ငါသည် နတ်အစည်း အဝေး သဘင်သို့ ဝင်ရတော့မည် မဟုတ်ဟု ကြံလျက်၊ တင့်တယ်သော မြခါးရန်းကြိုး ပြုံးပျက်တောက်ပသော အဝတ်တန်းဆာတို့ဖြင့် တန်ဆာဆင်အပ်သော နူးညံ့ရည်သွေးစွာသော ကိုယ်ဖြင့် ဘုရားလောင်းရှိရာ မဟာသမုဒ္ဒရာ အပြင်သို့သွား၍ မနီးမဝေးသော ကောင်းကင်က ကိုယ်ထင်ပြုကာရပ်လျက် ဤသို့ဆို၏။

(b) လွန်လေပြီးသောအခါ။ ဗာရာဏသီပြည်မှ မနီးမဝေးသော အရပ်၌ အမွန်ရှည်သော မြစ်သည်ရှိ၏။ ထိုမြစ်၏ ဤမှာ ဘက်ကမ်းနား၌နေသောဒဂါမဟု ဆိုအပ်သော တခုသော တငါရွာသည်ရှိ၏။ ထိုမှာဘက်ကမ်းနား၌လည်း တငါရွာ

သည်ရှိ၏။ တရာ တရွာ၌လည်း ငါးရာ ငါးရာသောတံငါ  
မျိုးတို့သည်နေကြကုန်၏။ ထိုနှစ်ရွာတို့၌လည်း တံငါကြီးနှစ်  
ယောက်တို့သည်ရှိကုန်၏။ အဆွေခင်ပွန်းပြု၍နေကုန်၏။ ထို  
တံငါကြီး နှစ်ယောက်တို့သည် ငယ်သောအခါ ကပင်လျှင်  
ကတိကဝတ်ပြု ကြကုန်၏။ အဆွေ။ ငါတို့ပင် တယောက်  
သောသူအား သွီးရှိသည်ဖြစ်အံ့။ တယောက်သောသူအား  
သား ယောက်ျား ရှိသည်ဖြစ်အံ့။ ထိုသားသွီးတို့အားထိမ်း  
မြားခြင်း မင်္ဂလာကိုပြုကြကုန်အံ့ဟု ကတိကဝတ်ပြုပြီးသော်  
ထိုသို့ ကတိကဝတ်ပြုပြီးသောကာလ၌။ ဤမှတစ်ဆင့်ရွာသူ  
ကြီးအား သား ယောက်ျား ဘွား၏။ ဤမှတစ်ဆင့် တပါး  
ရွာသူကြီး အိမ်၌ သားမိန်းကလေး ဘွားလေ၏။ ထိုနှစ်  
ယောက်သော သားငယ် သွီးငယ်တို့သည် အလွန်အဆင်း  
လှကုန်၏။ တံငါမျိုးဖြစ်သော်လည်း အသက်သတ်ခြင်း အ  
စရှိသောအစရှိက်ကိုမပြုကုန်။

- (င) ဇာလီမင်းသားသည်။ ဘိုးတော်မင်းကြီး။ တောအရပ်၌နေ  
ရသော ကျွန်ုပ်တို့သခင် ဝေဿန္တရာ မင်းအား ဆင် မြင်း  
ဆိတ် နွား ရထား ကျွန်ကျေးကို လှူဆင်သော်လည်း အ  
ဘယ်မှာအံ့နည်းဟုဆို၏။ ထိုမြေးတော်တို့စကားကိုကြား  
လျှင် သိဉ်းမင်းကြီးသည်။ ငါမြေးတော်တို့။ သင်တို့ ခ  
မည်းတော်၏ သားသွီးအလှူကို ငါတို့ချီးမွမ်းသည်သာဖြစ်  
၏။ မကဲ့ရဲ့ပါကုန်။ မြေးတော်တို့ကိုလှူသောအခါ သင့်ဘ  
ခင်သည် အဘယ်သို့နှလုံးရှိပါအံ့နည်းဟုဆို၏။ ဇာလီမင်း  
သားသည် ထိုစကားကိုကြားလျှင်။ ဘိုးတော်မင်းကြီး။ ဤ  
ပုဏ္ဏားအား အကျွန်ုပ်တို့ကိုလှူသောအခါ ခမည်းတော်၏  
နှလုံးသည်အလွန်ပူပင်ဆင်းရဲတော်မူ၏။ ပုဏ္ဏားအားလှူပြီး  
သည့်နောက်၌ ပုဏ္ဏား၏ရိုက်ပုတ်ဆင်းရဲခြင်းကိုမခံနိုင်သည်  
ဖြစ်၍အကျွန်ုပ်၏ နှမကဏ္ဍာဇိန်သည်။ ခမည်းတော်မင်းကြီး။  
အကျွန်ုပ်တို့ကို ပုဏ္ဏားသည် သားပေါက် ကျွန်မကဲ့သို့နှယ်  
ဖြင့် တုပ်နှောင်လျက် ပြင်းစွာ ပုတ်ခတ်ဘိ၏။ ပုဏ္ဏားမည်  
သည်တရားကိုစောင့်လေ့ရှိလျက် ဤသူကား ပုဏ္ဏားမဟုတ်  
ဘီလူးထင်၏။ အကျွန်ုပ်တို့ကိုစာအံ့သောငှါ ဆောင်ယူလာ  
သော ဤဘီလူးပုဏ္ဏားအား ခမည်းတော် အဘယ်ကြောင့်  
ရှုစိတ်ဘိသနည်းဟု သည်းစွာ ငိုကြွေးမြည်တမ်းသောအခါ  
ကျွန်ုပ်ခမည်းတော်မင်းကြီးသည် အလွန်ပင်ပန်းသောနှလုံး  
ရှိတော်မူသည်ဟုဆို၏။



TRANSLATION FROM MODERN TIBETAN INTO ENGLISH.

*Paper-Setter*—MR. KARMA SAMDON PAUL

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any two of the following :—

(a) ཡུམ་གྱིས་སྤྲུལ་གྱི་ཕྱག་ནས་འཛང་ལྟེ། མིག་མཆི་མས་གང་ནས་སྦྱས་པ། 20

བདག་གི་དྲི་མེད་ཀྱན་ནན་ལྟ་བུ་བདེ་བལ། དང་པོ་སྦྱེས་པའི་ཡ་མང་ཡིན་པས། སྤྱིང་དང་  
འདྲ་བའི་བྱ་བྱོད་དང་བཞག་ནས། འཇིགས་པའི་རི་ལ་འགོ་བ་འཕོད་ལགས་སམ། ལོ་ནི་  
བཅུ་གཉིས་ཉ་ཤང་རིར་འགོ་ན། མི་ལོ་བཅུ་གཉིས་ཀྱན་མོའི་ཆོ་སྤྲུལ། བྱིད་མེད་བདག་  
གི་སྦྱོང་གཏུང་སྤྲུལ་བྱིད། ཀུམ་ཁར་བྱ་དང་བྲལ་བ་ཀྱི་མ་ཉུང་། རྒྱལ་པོ་ཆེན་པོའི་ཐུགས་ལ་  
ཅི་དགོངས་ན། དང་པོ་སྤྲུལ་མེད་ཕྱག་བསྐྱེད་བསམ་མི་བྱུང་། ཡར་ལ་དཀོན་མཆོག་མཆོད་  
པའི་བྱིན་རྒྱལ་བས་དང་། མར་ལ་སྦྱིན་པ་བདང་བའི་འབྲས་བྱ་དང་། སྦྱབས་གནས་བྱ་  
བ་མེད་པའི་བྱིན་རྒྱལ་གྱིས། འོན་ཏེ་དཀོན་པའི་སྤྲུལ་ཅིག་བདག་ལ་བྱུང་། འཇམ་སྤྱིང་མ་  
ནམས་ཡིད་སྦྱོན་བྱིད་པའི་ཆོ། མ་ཐག་རིང་པོར་བཅུག་ནས་ཅི་བྱིད་པ། དང་པོར་མ་སྦྱེས་  
མེས་ཀྱི་ཁོ་ཐག་ཆོད། སྦྱེས་ནས་འདི་འདྲའི་ལས་ལ་སྦྱོར་བ་དེ། ཡབ་ཆེན་རྒྱལ་པོ་གདོན་  
གྱིས་མ་ལུས་སམ། ཞེས་གསུངས་པ་དང་། སྤྲུལ་གྱིས་ཞུས་པ། བདག་གི་ཡུམ་ཆེན་ཐུན་

ཆབ་ས་འདོན་ཅིག། ཁམས་གསུམ་འཁོར་པའི་སེམས་ཅན་ཐམས་ཅད་ཀྱང་། འདུས་ནས་  
བྲལ་བ་ཀྱན་གྱི་རྩ་ལྷགས་ཡིན། ཡུམ་ཆེན་བདག་ལ་བྱགས་ཡིད་འབྱེང་བ་འདི། གྲག་  
ལུས་ནས་བཅད་པའི་ལོས་ཀྱང་བདེན། མ་ཉིས་ནས་ཅིག་མཐའ་ནས་ལངས་དུས་ཡོང་། ཆོ་  
འདིར་ཡུམ་སྤུས་མཇུག་བའི་སྒྲོན་ལས་འདེབས།

(b) མངས་རྒྱས་ཀྱི་འཁྲུངས་རབས་ལ་གསུངས་པ། ཁོང་གིས་དྲགས་བཞི་མཐོང་བ་ 20  
དང་འཇིག་རྟེན་སྤངས་རྒྱ་ཡིན། དེ་ནས་ཁོང་མངས་རྒྱས་སུ་འགྱུར་རོ་ཞེས་ལུང་བཟུན་འདུག།  
ཁོང་གི་ཡབ་ཀྱིས་ཁོང་ལ་དྲགས་འདི་དག་མཐོང་ས་འཆུག་པའི་ཕྱིར་དུ་བྱ་ར་གང་ཐུབ་བྱས་སོ།  
དྲགས་རྣམས་ནི་འདི་ལྟ་སྟེ་ཆད་པོ་གཉིས་མ་ཅན་དང་ཡམ་ཡོས་ཅན་ཞིག་མཐོང་བ་དང་ནད་  
དྲག་པོས་བདབ་པའི་མི་ཞིག་མཐོང་བ་དང་རོ་མེ་ལ་སྤྱག་རན་པ་མཐོང་བ་དང་སྒྲོམ་མཁན་  
ཞིག་མཐོང་བ་རྣམས་སོ། སྒྲོན་གྱི་དྲགས་གསུམ་མཐོང་བ་དང་། ཁོང་ཐུགས་སྒྲོ་ནས་ཡིད་ཀྱང་  
སྤྱག་སྟེ་སྒྲོ་བ་ནི་ཤིན་དུ་སྤྱག་བསྡུལ་ཆེ་བ་ཡིན་པར་དགོངས། སྒྲོམ་མཁན་མཐོང་བ་དང་ཁོང་  
ལ་སྒྲེ་བ་མི་དྲག་པ་འདི་ལས་ཐར་བའི་རེ་བ་བྱུང་ངོ་། བྱིས་དང་རྒྱུང་ས་དང་སྤུས་སྤངས་ཏེ་  
དབྱ་སྒྲ་བྲགས་ནས་ཆོས་གོས་གསོལ་དེ་གཡོག་པོ་གཅིག་མཉམ་དུ་ཐེབས་ནས་ཡང་ཡབ་ལ་  
ལོ་རྒྱུས་བསྐྱར་ནས་ཁྲུས་པ། ང་ནི་སྒྲོམ་མཁན་དུ་གྱུར་བ་ཡིན་ཞེས་ཁྲུས་སོ། དེ་ནས་ཁོང་སྒྲེ་  
བ་འདི་ཡི་སྤྱག་བསྡུལ་ལས་ཐར་ཐབས་ལའོ་ལ་བའི་ཕྱིར་དཀའ་བ་སྤྱད་ཅིང་དྲིང་ངེ་འཛིན་ལ་  
བཞུགས་སོ། འདི་ནི་ཁོང་གི་བདག་འཛིན་སྤང་བ་ཞེས་པ་དེ་ལགས་སོ། ལོ་དྲུག་གི་བར་དུ་  
དཀའ་བ་དྲག་པོ་སྤྱད་པས་འཛོལ་མེད་པའི་ལྷན་གྱིས་སྤོབས་མེད་དེ་ས་ལ་དུན་མེད་འབྲེལ་  
བས་ཤི་བ་ཡིན་པར་བསམས་སོ། ཡང་ཁོང་དུན་གསེས་པ་དང་དཀའ་བ་སྤྱོད་པ་ལས་སྦྱར་  
བར་ཐག་གཅོད་ཅིང་སྒྲོམ་རྒྱལ་ནས་བདེན་པ་ཉིད་ལ་སྤྲིབ་མི་ཐུབ་པ་གཟིགས་ནས་ཟས་  
བཞེས་སོ། རོགས་བྲམ་ཟེ་རྣམས་ཀྱིས་ཁོང་ལ་སྤངས་ཏེ་ཁྱ་ར་ན་སིར་ལོག་སོང་ངོ་། ནང་པ་  
རྣམས་ཀྱིས་མངས་རྒྱས་དྲིང་ངེ་འཛིན་ལ་བཞུགས་ནས་དཀའ་བ་དྲག་པོ་འདི་ལ་ཤིན་དུ་  
བཞུད་དོ།





(b) ಮೊದಲನೆಯ ಭಾಗವು ಪರಿವರ್ತನಕಾರರ ಉಪೋದ್ಘಾತಣಾಗಿದೆ. ಈ ಉಪೋದ್ಘಾತವು ಮೂಲಕ್ಕಿಂತಲೂ ದೊಡ್ಡದಾಗಿರುವುದೇ ಇದರ ವಿಶೇಷ. ಇದರಲ್ಲಿರುವ ವಿಷಯಗಳಾದರೋ, ೧೯೧೪ ನೆಯ ಸಾರ್ವತ್ರಿಕ ಮಹಾಯುದ್ಧದ ವಿಚಾರ ಮೊದಲ್ಗೊಂಡು ಮುನ್ನೆ ಬೆಂಗಳೂರಿನಲ್ಲಿ ನಡೆದ ಗಲಾಟೆಯ ವಿಚಾರದ ವರೆಗೂ ಹಬ್ಬಿವೆ. ಪರಿವರ್ತನಕಾರರು ರಾವು ರಚಿಸಿರುವ ಅನೇಕ ಗ್ರಂಥಗಳನ್ನೂ, ರಾವು ಮಾಡ ಬೇಕೆಂದುದ್ದೇಶಿಸಿರುವ ದೇಶಹಿತ ಕಾರ್ಯವನ್ನೂ ಪ್ರಕಟಪಡಿಸಲೋ ಎಂಬಂತೆ ವಾಚಕರ ಗಮನವನ್ನು ಆಗಾಗ ಅವಕ್ಕೆ ಸೆಳೆಯುತ್ತಿರುವರು. ಅನ್ಯದೇಶೀಯರಾದ ಅನೇಕ ಮಂದಿ ಪಂಡಿತರ ಹೆಸರನ್ನೂ ಅವರ ಗ್ರಂಥಗಳನ್ನೂ ಆಗಾಗ ಹೇಳುವುದರಿಂದ, ಇವರ ಹೆಸರನ್ನೆ ಅರಿಯದ ಕನ್ನಡಿಗರಿಗೆ ಏನು ಪ್ರಯೋಜನವಾದಂತಾಯಿತು ? ಈ ಉಪೋದ್ಘಾತವನ್ನು ಓದುವಾಗ, ಶ್ರೀಮಾನ್ ರಾಧಾಕೃಷ್ಣಯ್ಯರವರ “ ಭಾರತ ಧರ್ಮಕ್ಕೂ ” ಉಪೋದ್ಘಾತದಲ್ಲಿ ಚರ್ಚಿಸಿರುವ ಅನೇಕಾನೇಕಸ್ಥಳೀಯ ವಿಷಯಗಳಿಗೂ ನಿಕಟ ಸಂಬಂಧವನ್ನು ಕಲ್ಪಿಸುವುದು ಹೇಗೆ ? ಎಂಬುದು ವಾಚಕರನ್ನು ಬಾಧಿಸುವುದು. ಪ್ರಪಂಚದಲ್ಲೆಲ್ಲ ಅತ್ಯಂತ ಪ್ರಸಿದ್ಧಿಪಡೆದಿರುವ ಪ್ರೌಢಶಾಸ್ತ್ರಜ್ಞರನ್ನೂ ಕೇವಲ ಸಾಮಾನ್ಯರಾದ ಸ್ಥಳೀಯ ಕರ್ಮಕಾರರನ್ನೂ ಒಂದೇ ಅಂತಸ್ತಿನಲ್ಲಿರುವ ಹಾಗೆ ತೋರುವಂತೆ ಹೋಗಳಿರುವುದು ಲೇಖಕರ ತಾರತಮ್ಯ ಜ್ಞಾನವನ್ನು ಪ್ರಶಂಸಿಸುವಂತಿಲ್ಲ. ಅಂತು, ಈ ಉಪೋದ್ಘಾತವನ್ನು ಬರೆಯದಿದ್ದಲ್ಲಿ, ಪರಿವರ್ತನಕಾರರ ಶ್ರಮವು ಹೆಚ್ಚಾಗಿ ಅಭಿನಂದನೀಯವಾಗುತ್ತಿತ್ತೆಂದು ತೋರುವುದು.

(c) ಪ್ರಕೃತ, ಮೇಲೆ ಹೇಳಿದ ರೀತಿಯಲ್ಲಿ ಪರರಲ್ಲಿ ದ್ವೇಷದಿಂದಲೋ ಅಥವಾ ತಮಗೆ ಫಲಪ್ರಾಪ್ತಿಯಾಗ ಬೇಕೆಂಬ ಅಭಿಲಾಷೆಯಿಂದಲೋ, ಅಥವಾ ಬ್ರಾಹ್ಮಣಾದಿ ವರ್ಣಭೇದವನ್ನು ಒಪ್ಪದೆ ಇರುವ ಜನಗಳ ಉಪದೇಶದಲ್ಲಿ ನಂಬಿಕೆಯಿಂದಲೋ ನಮ್ಮ ಭಾರತೀಯ ಸಹೋದರರು ಬ್ರಾಹ್ಮಣದ್ವೇಷವನ್ನು ಮಾಡುತ್ತಿರಬಹುದು. ಇದು ಹೇಗಾದರೂ ಆಗಲಿ. ಇವರು ತಮ್ಮಗೂ, ತಮ್ಮ ದೇಶದ ಜನಗಳಿಗಿಲ್ಲರಿಗೂ ಸುಖವುಂಟಾಗುವುದಕ್ಕೆ ಸಾಧನಗಳನ್ನು ಚೆನ್ನಾಗಿ ತಿಳಿದು ಕೊಳ್ಳಲಿಲ್ಲವೆಂದು ಹೇಳ ಬೇಕಾಗಿದೆ. ಹೇಗೆ ಎಂದರೆ — ಅನೇಕವಾದ ಬೇರೆ ಬೇರೆ ದೇಶಗಳಿವೆ. ಅಲ್ಲಲ್ಲಿ ವಾಸ ಮಾಡುವ ಜನರೆಲ್ಲರೂ ತಮ್ಮ ತಮ್ಮ ದೇಶದ ಅಭಿವೃದ್ಧಿಗಾಗಿ ನಡೆಸ ತಕ್ಕ ಕಾರ್ಯಗಳಲ್ಲಿ ಐಕ್ಯಮತ್ಯವನ್ನು ಹೊಂದಿ ಶಕ್ಯವಾದಷ್ಟು ಫಲಗಳನ್ನು ಹೊಂದುತ್ತಿರುವರು. ಅವರಲ್ಲಿರುವ ಬೇರೆ ಬೇರೆ ಅನುಪತ್ತಿಗಳನ್ನು ಮಹಾಕಾರ್ಯಗಳ ಸಾಧನೆಯಲ್ಲಿ ಬಾಧಕವಾಗುವಂತೆ ಯೋಚನೆಗೇ ತರುವುದಿಲ್ಲ. ಈ ಪ್ರಕಾರ ವರ್ತಿಸುವ ಜನಗಳಿಂದ ನಿಬಿಡವಾದ ದೇಶವೆಲ್ಲವೂ ಅತ್ಯಂತ

ಕ್ಷೇಮಸ್ಥಿತಿಯಲ್ಲಿದೆ. ದಿನಕ್ರಮದಿಂದ ಅಭಿವೃದ್ಧಿಯನ್ನೂ ಪಡೆಯುತ್ತಲಿದೆ. ನಮ್ಮ ಭರತಖಂಡವೂ ಕೂಡ ಬಹುಕಾಲದ ಹಿಂದೆ ವರ್ಣಾಶ್ರಮ ಧರ್ಮಗಳನ್ನು ಅನುಸರಿಸಿ ವರ್ತಿಸುತ್ತಿದ್ದ ಜನಗಳಿಂದಲೇ ನೆನಪಿನಾಗಿದ್ದು ವಿದ್ಯಾವಿಷಯದಲ್ಲಿಯೂ ಇತರಗಳ ವಿಷಯದಲ್ಲಿಯೂ, ಒಬ್ಬರಿಗೊಬ್ಬರು ಹಿತಚಿಂತಕರಾಗಿರುವುದರಲ್ಲಿಯೂ, ತಮ್ಮ ತಮ್ಮ ಸಂಪತ್ತನ್ನು ತಾವೆ ಅನುಭವಿಸ ಬೇಕೆಂಬ ಲೋಭ ದೃಷ್ಟಿಯಲ್ಲದೆ, ಸರ್ವಪ್ರಾಣಿಗಳಿಗೂ ಹಿತಸಾಧನವಾಗುವಂತೆ ತಮ್ಮ ಉಪಪತ್ತಿಯನ್ನು ವಿನಿಯೋಗಿಸುವ ಮಾದ್ರುತ್ತಿಯ ದರಲ್ಲಿಯೂ, ಗುಣಾಧಿಕರಲ್ಲಿ ನಮ್ರತೆಯಲ್ಲಿಯೂ, ಹೆಚ್ಚೇಕೆ? ಸರ್ವಜನರ ಒಳಿತಿಗಾಗಲಿ ಅನ ದೇಶಕ್ಕೂ ಹಿಂದೆ ಬೀಳದಂತೆ ಪ್ರಕಾಶಮಾನವಾಗಿರಲಿಲ್ಲವೆ?

### TRANSLATION FROM KHASI INTO ENGLISH

*Paper-Setter*—MR. ROY ROWLAND THOMAS, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate into English any *two* of the following passages :—

(a) Ha kawei ka por la khie ka thma kaba neh slem shibun 20  
hapdeng u laiphewmrada bad u laiphewsim. Bunsien kila lakh ki mrad.  
Bad haba kumta u lymbit u leit sha ki bad u ong, 'Kolok, phi i nga  
ruh u mrad hi kum phi, namar ngam don suer kum ki sin la nga her  
kum ki, hynrei nga don shniuh bad ki bniat kiba nep kum ki jong plu  
hi.' Hynrei ynda haditen ka thma kala kylla. Da ka jing arap ki  
Pukni la pypher krad ia u laiphewmrada baroh shapoh khilaw. U lymbit  
ynda u la iohi ia kane ula leit ialang lok sa bad ki Sim pat, u ong,  
'Ko lok, phi i nga ruh ka sim kum phi hi, la nga don shisha u shniuh  
bad ki bniat kum ki mrad, hynrei nga shu her kum plu hi, ngam don  
kti ngam don kiat kum u mrad bad ngam lah ban iaid.'

(b) Ha kawei ka meit u suri u la leit shang tuh kylleng hynrei 20  
um ioh ei ei rul. Ynda hadien u wan poi ha shakiar kawei ka ing.  
Hangta ka kmie ka mai la i khun iba iam bad ka ong, 'En jar, ioh  
nga shat shabar un kem u suri.' U, ba u nang mut ka kren shisha  
u la ap dngong bad u la pyrah, u da tharai ba un sa ioh ban kdang  
hun la shibit. Ynda la shiphang ita i khynnah khynnah i la en, bad  
ka kmie ka la khroh la kyor pat ia i ka ong, 'Iada wan u suri mynta  
ngan pduh haba unda khein ka skhep.' Hangta u suri u la jew sew  
bad u la leit wan tui sha la krem u da ong arad, 'Kumne kein haba  
sngap ia ka kynthai kaba kren da kumwei bad kaba mut da kumwei  
pat.'

(c) U Pluto u la ai kylliang ha U Perseus ia ka jingphongkhliah 20  
ba phylla jong u kaba pynlong ia u nongphong ban ym iohi da kiwei,  
Ka Minerba ka la ai ia ka stieh jong ka kaba phyrni kum ka ksar,  
bad ka phyrnai haduh katta katta katba ka shu shat ia kiei kiei kum  
ha ka iit; bad U Merkuri hi ruh u la ai ia ka waitlam kdor kaba nep  
bad ia ki juti thapniang da kiba U Perseus u lah ban her kham sted  
ban ia ka sim kaba stet tam.

Kaba U Perseus mynta u la dei ban leh ka long tang ban sheni ia  
ka lynti sha ka ing dewlynnong jong U Medusa, bad ki briew ha ka  
pyrthei baroh kibatip ia kata ki long tang ki laingut shipara kynthai  
kiba la shong lang hapoh ka krem.

TRANSLATION FROM LUSHAI INTO ENGLISH

*Paper-Setter*—REV. F. L. MENDUS, B.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate any two of the following passages into English of your own composition :— 20

(a) Tin, Hrilfiachtua chuan pindan báltak Phiah fai ngai hleih lohah hian a kai lút a. Chu mi pindan chu rei fê a en hmuin Hrilfiachtua chuan a phiat turin mi a ko va. Chumi chuan a han phiat a. hawlllawh chu a leng chum chum mai a, Kristiana chuan a hâk ta nual mai a. Tin, Hrilfiachtua chuan a kianga nula ding hnenah chuan. 'Tui han la la, pindan hi theh rawh' a ti a; tin, nula chuan tui a theh hnu chuan an han phiat leh a, awltakin a fai thei ta a. Chutichuan Kristiana chuan 'Hei engtihnange ni lo?' a ti a. Hrilfiachtua chuan, 'Hemi pindan hi mihring rilru Chan-hin Thain a tithi-anglim ngai loh ang a ni a, bawhlawh chu mihring pianpoi leh rilru sual mi a pum a a tihbawhlawh a ni. Tin, a han phiat tantu chu dân ang a ni a; tin, nula tui a rawn thehtu chu Chan-hin Tha ang a ni. 20

(b) Tin, zung chu a lo ni a, a hnung lam chu a ban bawi a : nimahsela kir leh duh a hawi a ni lo va, hlauhawm tak tak thim zinga a polh te chu chhun ên ah hmuh a duh avang a ni zawk. 20

Chutichuan kawng sira khwar-khurm leh a lehlan panga chirh diak hmun chu fiaktakin a hmu a, a inkar zimzia te pawh chu a hmu vek a. Tin phungte leh rulte pawh kha a hmu vek a nimahsela hlatakah an awm vek a. khawvar hnu chuan an hnaiah an lokal lo va, nimahsela anmahni chu a hmu thei vek a. 'Thima thil harsa te chu a hmu chluak a, thihna hlim chu a tieng' tih ziaak angin.

(c) Chutichuan an kal zêl a, Tlângnuam an va thleng a; chu tlâng chu tun hmaa kan sawi tawh ram neitu Lal kan tih ta kha a ni. Chutichuan huan te leh thei hmun te, greip huante leh tuikhur te en turin chu tlângah chuan an han lăwn chho va; chuta tuite chu an in an inbual bawh a. 20

Greip rahte pawh chu an duh tawh in an ei a. Tin, chumi tlâng chhipah chuan beramvêngtute an beram vêngin kawng sirah chuan an ding hlawn a. Chutichuan Kristiana leh Beiseia chu an bnenah chuan an han kal a, an tiang rin chhan in an han ding a; 'Hei hi tu tlâng nge ni' In beram vên hi tu ta nge ni?' tinn an han zawt a. Berampute chuan, 'He tlâng hi Imanuela ram a ni' an ti a.

## TRANSLATION FROM GARO INTO ENGLISH

*Paper-Setter—MR. F. W. HARDING.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate into English any two of the following three passages :—

(a) Indiba naa, Israel. angni nokol, angni see ragiinin Jakob, angni ripeng Abrahamni deritcheu, anga nangko aani kuhotrangoniko rimaha, aro uni kitikrangoniko okamaha, aro nangna agane inaha, Naa angni nokol onga, anga nangko ste raaha, aro nangko galkuja; daken, maina anga nang baksa gnan; kengoknabe, maina anga nangi Isol angni nokol onga, anga nangko see raaha, aro nangko galkuja; daken, maina anga nang baksa gnan; kengoknabe, maina anga nangni Isol pilak kaonang-giparang kratchaatako aro jajaatako mangen; nang baksa gisigrikkiparang mamung gri gita ongen, aro gimagen. Naa uamangko, chongmotan, nang baksa itegrikkiparangko angen, indiba uamangko nikjawa; nangko dakgrikkiparang mamung gri gita, aro bangbanggipa gita ongen. Maina anga, Jihova nangni Isol, nangni jakrako rime nangna agangen, Daken; anga nangko dakchakgen. Daken naa jong Jakob aro nasimang Israelni manderang; anga nangko dakchakgen, aro nangko Liokgipa Israelni Rongtalgipa onga me Jihova agana.

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(b) Aro ua atamona kingking abao kolamaha, aro uni kolangiminko doke nakaha, aro ua job mi ephasamang ongachim. Aro ua uko detome songjinmaona rebaha; aro uni niotang uni kolangiminko nikaha, aro ua antangni okkamano gitichagiminko bikote una onaha. Aro uni niotang una aganaha, Naa daalo baoniko kolamaha? Aro naa bao kam kaaha? Nangna simsakgipa patiake manchina. Unon ua san baksa kam kaaha uko uni niotangna agane inaha. Jen baksa anga daalo kam kaaha ua mandeni himung Boaz. Aro Naomi uni namchiktangna aganaha, Tangenggipana aro sanggiminrangna antang ka-aako watgijagipa, Jihovani patiake uan manchina. Aro Naomi una aganaha, Ua mande anchingni sepanggipa bak, anchingko nalokna atgipa saksa onga. Aro Moabni mechik Ruth aganaha, Ua angna aganaha aganaha, Angni pilak mi raaniko bonjaskal, angni panterang baksa dongrimpabo. Aro Naomi uni namchiktang Ruthna aganaha. Gipin abao nangek grongjana gita uni metarang baksa rtongkatangan nana, ang de. Indake job mi raaniko aro goni mi raaniko bonkujana kingking ua kolamna Boazni metarang baksa dongripaaha; aro ua niotang baksa dongaha.

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(c) Chengon agilsako rokomsa mande dongachim. Uamanga bangani giminar daororoni bisarang gita ongachim. Uamang sena aro poraina ukujachim; gisikni chanchiako chuonge parakna uamangni nanga gita kusik grichim. Uamang songna changjachim. Bite aro jadilrangko gitang chae janggi tangachim. Nasimang gita uamangni gana chinani grichim, matbigilni gananiko gane uamang kratchaaniko pindapachim, aro uamang uarango kona changjachim. Daororo anchingni namnambegipa nokrangko rikna changjachim. Uni gimim uamanga beben bisa chongiparang gita uigijagiparang onga-him. Indiba

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uamanga maiiao dongachim? Mitama makrerang gita bolrango dongachim, mitama abrimi rongkolrango dongachim. Sinkari aro dingkari-rango haida uamang baditan dukko manaha, sinani gimini uamang waal sikna manjachim, dongtogria onge dongachim. Aro rongkolni kumangona sal teng-uana king king beeno matbigilko bilome dongachim. Daororo an'hinga bajalo badita rokom chaani bosturangko manna ama, indiba unode indake bajalba grichin; chaani bostuba tarigimin dongjachim dongade. Skango manderang chri aro brachi matburunrangko sikar kaachim. Gi-ep gisep selu'hi natokko suachim. Been gitangan uamangni mong-onggipa chaani ongachim. Roongko tongsa pegake goolni kuchoto chate bia dakachim. Ia pilak brani kuchoto chatanirangko banga biaprangonikon akolko choe manaha, aro indake donga bosturangchin anchinga skangni salni manderangni obostani gimni uina mana.

### TRANSLATION FROM MALAYALAM INTO ENGLISH.

*Paper-Setter*—RAO BAHADUR L. K. ANANTHAKRISHNA AIYER,  
B.A., L.T.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate into English any two of the following passages :—

(a) കോയമ്പത്തൂർ മലകളിൽ ഒരു കൂട്ടരുണ്ട്. അവർ 20

തങ്ങൾ ഇരട്ടിരാണെന്നു പറയും. സാമാന്യം എന്തെ  
എറച്ചിയും തിന്നും. പച്ച, പൂച്ച, തവച്ച, കരടി  
വെള്ളകുരങ്ങൻ ഇതിന്റെ തിന്നുകയില്ല. ജാതികൂട്ടം  
തിന്നാൻ തലവൻ ഉണ്ട്. അവന്നു പേർ യജമാനൻ  
എന്നാകുന്നു. അവന്നു സഹായിപ്പാൻ ഒരു കോല്ലാ  
രണം വേറെയുണ്ടാകും ഉണ്ട്. ദത്താത്രേയകുടി ഇരിപ്പാൻ  
കൂട്ടാക്കാത്ത സ്ത്രീക്കു ശിക്ഷ ചെയ്യാനുണ്ട്.

(b) ഏടയൻ കല്യാണം ചെയ്താൽ ഭാര്യയുടെ 20 ഗോത്രമായി. അച്ഛന്റെ മുതലിന്നല്ല അവകാശം. ചിലവകക്കാർക്കു വിധവാ വിവാഹം ധാരാളം നടപ്പുണ്ട്. മധുരജില്ലയിൽ പുതുനാട ഏടയരിൽ അച്ഛന്റെ മരുമകളെ കേട്ടാൻ അവകാശമുണ്ട്. പുരുഷനപെണ്ണി നെക്കാൾ നന്നെപ്രായം കുറയുന്ന പക്ഷം അവന്റെ ഭാഗത്തുനിന്നു വേറെ വല്ലവനും കെട്ടാം. താലികെട്ടു നൂത മണവാളന്റെ സോദരിയാണു.

(c) ഒട്ടർ തെലുക്കുറാണു. പണം ഉണ്ടെങ്കിൽ 20 അത ഒട്ടെടുത്തവരെ മദ്യം സേവിക്കാം എഴുത്തറിയുന്നവരില്ല. കുളംകിണറു കുഴിക്കുക ചിറമാടക ഈ വകയാണു പണി. എത്ര പണി എടുത്തു എന്നു കണക്കു കൂട്ടാൻ പോലും അറിഞ്ഞുകൂടാ. സാമാന്യം എന്തു തിന്നും. ഭാര്യയെ ഉപേക്ഷിക്കു ധാരാളമാണു. ഒരു തിക്കു ഒരോരുത്തനായി പതിനെട്ടു ഭർത്താക്കന്മാരോളം ആവാം പുരുഷന ഈ അതിരും ഇല്ല. പീതുവായാൽ ഏഴു ദിവസം അശുദ്ധിയുണ്ട്, വേറെ ഒരു പുരയിൽ ഇരിക്കണം. ആകാലം മാംസം വാടില്ല, മുട്ട തിന്നാം. ഏഴാം ദിവസം ഒരു കോഴിയെ പെണ്ണുന ഒഴിഞ്ഞു വലിച്ചെറിയും.

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## TRANSLATION FROM TAMIL INTO ENGLISH.

Paper-Setters— { RAO BAHADUR L. K. ANANTHAKRISHNA AIYER,  
B.A., L.T.  
MAHAMAHOPADHYAY VEDANTAVISARAD  
ANANTAKRISHNA SASTRI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate into English any two of the following passages :—

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(a) பரதர் பார்த்துவாசருடைய ஆச்சிரமத்தில் தங்குவதாகத் தீர்மானம் செய்கிற விருந்தை நீர் அங்கீகரிக்கவேண்டுமென்றார். பரதர் மஹானுபாவரே! முன்னமே எனக்கு விருந்து செய்தாயிற்று. அர்க்கியம் பாத்தியம் ஆசமனீயம் முதலியன கெடுத்து உபசரித்தீரே? இதை விட வனததில் என்ன இருக்கிறது என்றார். பார்த்துவாஜர் பார்த்தாரே!

(b) நீர் காய்கனிகள் முதலிய வந்த பொருள்களாலும் திரும்ப 20 பதியடவீர் என்பது எனக்கு தெரியும் ஆயினும் நான் உமது சேனைகளுக்கு விருந்து செய்ய விரும்புகிறேன். ஆகையால் நீர் விருப்பத்தை சிறைவேற்றவேண்டும் உம்முடைய சேனைகளைத் தூத்திலேயே நிறுத்தி விட்டு நீர் மாதவி என் தனித்து வந்தீர் என்றார். பரிவரங்க ளையுடைய நீ உன்சேனைகளுடன் என் வரக்குடாது? என்று கேட்டார்.

(c) பரதர் மஹானுபாவரே நான் உமக்குப் பயந்தேன் சே 20 னைகளை தூத்திலே விட்டு வந்தேன். அரசர்களும் அரசர்குமாரர்களும் முனிவர்களுடைய ஆச்சிரமத்தை அணுதாமஸ் ஜாக்கிரத்தையா விருக்க வேண்டும். குதிரைகள், மனிதர்கள் முதல் கொண்ட சிறந்த யானைகள் வராளமாக என்னை தொடர்ந்து வந்திருக்கின்றன, அவைகள் இந்த ஆச்சிரமத்திலுள்ள மரங்கள் சுத்த ஜலம், இந்த ஆச்சிரமத் துக்குரிய குடிசைகள் முதலியவற்றுக்கு இடையூறு உண்டாகாத படி நான் தனித்து வந்தேன் என்றார்.



TRANSLATION FROM TELUGU INTO ENGLISH.

*Paper-Setter—MR. B. RAMACHANDRA RAU, M.A.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Translate any two of the following passages into idiomatic English :-

(a) భార్యకాలమునందు దన బాహువరాక్రమము చేతను, విద్యా 20  
ధికతచేతను, సుగుణసంపదచేతను, రాజనృశ్రేష్ఠుడని బిరుదుసంధి  
కృష్ణదేవరాయలు విజయనగరరాజ్యము నేలుచుండెను. ఆ రాజునకు  
“రత్నాంబ” యను ముద్దుకూతురు గలదు, రత్నాంబ, తాను మూ  
రాజపుత్రికనని యెంతమాత్రమును గర్వమునొందక, తలిదండ్రుల  
యందు భయభక్తులు గలిగి, వారు తనకుఁ జెప్పించు సువిద్యలన్నియు  
మిగుల శ్రద్ధతో నేర్చెను. కావుననే, పదునాలుగు సంవత్సరముల  
లేతతనమున్ను నున్నను, రత్నాంబ, యాకాలమున గొప్పయింటి  
బాలలు నేర్వవలసిన విద్యలను, ధర్మములను నేర్చి, తన పుట్టుకచేతనే  
గాక తన సౌందర్యముచేతను, బుద్ధిచతురతచేతను, నయనంపదచేతను,  
దప్పక “మహారాజపుత్రిక” యె యని యందఱిచే ననిపించుకొనెను,  
సాధారణ భాగ్యవతులవలె రత్నాంబ వ్యర్థముగ నాటలయందును,  
సుఖములయందును గాలము గడుపక, యుపయుక్తములగు విషయము  
లను గుఱించి, తన చెలికత్తెలతోఁ బలుమారు ప్రసంగించుచుండును.

(b) ఒకీలియను బిలిపించి రాజిగారు బహుయాదరణ చేసిరి. 20  
హస్తంబుకీ దాంపత్యమునఁ జెడినమఠి విఠిగినయెడల, పట్టినదయ్యము  
విడిచినయెడల, రాజిగారికి వివాహమిష్టమే. అది లోపాలోపము

పెట్టున్నాను, హ్యంలెటు తనకు మురిపంపు బిడ్డడు. నీసాందర్యవిలసనమే, మాహ్యంలెటుమొక్క చుండగములకుఁ గారణమైయుండనువును. అగువక్షమున, నీసుగుణము లతనిని యథామతికిఁదిరిగి దింపిన యెడల నాధన్యత యంతయంత యనరాదు. అని ఒఫీలియాతో ననెను. నాకోరికయు నదియేనమ్మా. అని ఒఫీలియాబడలు. కాని, ఆనతికాలముననే, హ్యంలెటు, ఆయుత్తరక్షణమునఁ దలఁచునది యామెమగాదని తెలిసికొన్నది. ఒక గ్రంథమును గెంగేలఁబూని తననియమితస్థలమున హ్యంలెటు ప్రవేశించెను. పొలోనియసుక్లాడియసులు తెఱమఱుగున నొరులుదాకలు చేసికొని దాఁగియుండిరి. కొంత నేపువఱకును, హ్యంలెటు, ఆమెను గన్పెత్తియైనను బూడ లేదు.

(౧) నూలు సంవత్సరముల క్రిందట నీ రెండు గ్రామములకును 20 గరణ మొకఁడే. అప్పటి కరణమగు గువ్వలూరి రాజన్న గువ్వలూరిలో నివసించుచు, పసియున్నపుడు మధ్యాహ్నమున గువ్వపల్లె పోయి, రాత్రి కిలు సేరుచుండెను. వేసవికాలములో సెక దినమున రాజన్న గువ్వపల్లెకు వచ్చి, తన యద్యోగపుఁ బనులు చూచుకొని, యెండ తగ్గనందు వలనను, తనకా దారి కొట్టిన పిండియే యగుటచేతను, ఎప్పటికంటె గొంచెమాలస్యముగ నింటికి బయలుదేరెను. చీకటి పడినను వేడిగాడుపులు తగ్గకుండెను. దారిలో సామాన్యముగ నాతని తెవరో సహవాసము దొరకుచునే యుండురు. ఆ రాత్రి మాత్ర మెవరును తోడులేకుండిరి. అది మైగా సంజచీకటిరాత్రి. ఏఁబదియేండ్ల వయస్సుదాటినను, దేహపటుత్వము గలిగి, కాయకష్టమున కోర్చినవాఁడగుటచే రాజన్న కిట్టి పయన మొక లెక్కలోనిది గాదు. 'కాని యెండతీవ్రత కాతనికి సాయంకాలము శరీరము బలహీనముగుచుండెను. అందుచేతనే యీ క్రోశము దూరము నామడ వలెనతనికిఁ దోచెను.

## TRANSLATION FROM FRENCH INTO ENGLISH

*Paper-Setters*— { REV. FR. E. POPULAIRE, S.J.  
 { MR. NAGENDRANATH CHANDRA, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any *two* of the following passages :—

(a) Victor Hugo avait adressé un exemplaire de ses poésies à un enfant de grenoble; celui-ci écrivit au poète une lettre de remerciement. Cette première lettre resta sans réponse; l'enfant en écrivit une seconde, et reçut, au bout de quelques jours, les lignes suivantes :

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' Je vous dois depuis bien longtemps une réponse, mon cher petit enfant; mais, voyez-vous, j'ai les yeux bien malades, il faut m'excuser. Les médecins me défendent d'écrire; j'obéis aux médecins, comme vous obéissez à votre mère. Il faut obéir toute sa vie, n'oubliez pas cela. Mais vous, qui êtes petit, vous êtes plus heureux que moi, car à votre âge l'obéissance doit être douce; au mien elle est dure quelquefois; vous le voyez, puisqu'on m'a empêché de vous écrire. Adieu, mon petit ami, devenez grand et restez sage.'

(b) Un Indien accusant un Espagnol de lui avoir volé son cheval; l'Espagnol prétendait l'avoir élevé, et le juge était embarrassé. Tout à coup, l'Indien ôte son manteau, en couvre la tête du cheval et dit : Puisque cet homme a élevé ce cheval, il doit savoir de quel oeil il est borgne.

20

L'Espagnol, pour ne pas paraître hésiter, répond immédiatement : ' De l'œil droit.' ' Il a tort,' ajouta l'Indien.—' Mais non,' continua l'Espagnol, ' car je voulais dire l'œil à ma droite.'—' Mensonge,' s'écria l'Indien découvrant la tête du cheval, ' car il n'est borgne ni de l'un ni de l'autre.' Le juge, convaincu par cette preuve ingénieuse fit remettre le cheval à l'Indien.

(c) Travaillez, prenez de la peine, car le travail donne un revenu assuré.—Un laboureur, sur le point de mourir, réunit ses enfants autour de lui : ' Quand je serai mort,' leur dit-il, ' ne vendez pas le champ que nos aïeux nous ont laissé; un trésor y est caché; je ne sais pas l'endroit, mais, si vous cherchez bien, vous le trouverez sans doute. Remuez la terre aussitôt après la moisson : bêchez, creusez, fouillez, ne laissez nul endroit sans le retourner dans tous les sens.'

20

Après la mort du père, les fils prirent des baches et des hoyaux et fouillèrent le champ de tous les côtés. Ils ne trouvèrent point de trésor, mais la terre, si bien remuée, produisit une récolte abondante. Alors les enfants comprirent que le travail était le trésor dont leur père avait parlé.

## TRANSLATION FROM PORTUGUESE INTO ENGLISH

*Paper-Setter*—DR. P. D. BRAGANCA CUNHA.*Candidates are required to give their answers in their own words as far as practicable.**The figures in the margin indicate full marks.*1. Translate into English any *two* of the following passages :—

40

(a) O General Graves, idoso, mas de porte marcial, commandante do exercito do Egipto, occupava o seu lugar como arbitro no camarote do juiz em frente do pavilhão; quatro esquadroes de cavalaria britanica e egipcia, uma força de infantaria e um corpo de camelos vieram postar-se a esquerda, e depois fez a sua entrada no campo o jovem coronel Gordon Lord, ajudante-geral, que devia desempenhar o papel de comandante do simulacro de luta.

(b) Era o dia apasado para a recolha dos carneiros em Thingvellir : o redil ficava a umas trinta milhas; não havia caminho de ferro nem carros, e poucas eram as estradas na Islandia, de sorte que os habitantes, resolvidos a fazerem daquele facto um dia festivo, tinham de sair cedo nos seus cavalos cobertos dum pelo intonso.

(c) Faze da tua parte, que Deus te ajudara—é uma maxima de valor provado, a qual encerra em mui limitado quadro os resultados da mais larga experiencia. O espirito de espontaneidade individual é a origem de todo o de-envolvimento normal no individuo, e quando se manifesta em um grande numero de homens, constitue o verdadeiro fundamento da força e da energia nacional. O apoio que nos vem do exterior e de ordinario tao enervador em seus effeitos, quão invariavelmente fortalecedor o o que nos vem do intimo de nós mesmos. Tudo quanto é feito por outrem em proveito nosso, nos exime da necessidade a até nos tira o desejo de o fazermos com esforço nosso proprio; e onde quer que o individuo se ochar submettido a um excesso de protecção e de governo, a tendencia inevitavel de um tal systema sera para reduzi-lo a um estado de fraqueza relativa.

## FIRST PAPER—PART (B)

## ESSAYS, GRAMMAR, AND COMPOSITION

*Candidates are required to give their answers in their own words as far as practicable.**The figures in the margin indicate full marks.*1. Describe *one* of the following :—

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(a) A village fair.

(b) A dramatic performance at which you may have been present.

(c) Your school.

2. Expand *one* of the following groups of notes into an essay on the topic indicated :—

15

(a) Leisure : its necessity—its use and abuse—the way in which you prefer to employ your leisure.

(b) Travelling: general remarks on travelling, its pleasure and utility—different modes of travelling, *e.g.*, on foot, by railway train, by boat—their respective pleasures and inconveniences—any long journey which you may have undertaken.

3. *Either*, Punctuate the following passage, using capitals, wherever necessary :— 10

Just let go my hand can't you what business had your hand in my pocket replied I angrily I was just feeling for my pocket-handkerchief replied the young man I always keep it in my breeches pocket but not in my neighbours I presume my neighbours replied he with a vacant stare well so it is I see now I thought it was my own I released his hand and pray who are you said I me why I'm a fool more knave than fool I expect replied I much puzzled.

Or, (a) Analyse the following sentence into clauses, stating the nature of each dependent clause and its relation to the clause on which it depends :— 6

In one of our late excursions into the country, *happening* to discourse upon the provision that was made for the poor in England, he seemed amazed *how* any of his countrymen *could be* so foolishly weak *as* to relieve occasional objects of charity, when the laws had made such ample provision for their support.

(b) Parse the italicized words in the above extract. 4

4. (a) The following absurd telegram was once actually sent to the Police. Re-write it so as to make it intelligible and grammatically complete :— 4

Gray motor-car passed here 11 30 killing one of my heifers containing four men and two of my dogs one of whom was a clergyman.

(b) Correct *four* of the following sentences :— 4

- (i) He has taken admission into the school.
- (ii) I saw a bad dream last night.
- (iii) He had hardly gone than his friend came.
- (iv) Even such a strong man like him could not lift the box.
- (v) The reason of my silence is due to my illness.
- (vi) One of his family members is dead.

5. Fill up the gaps in *either* (a) or (b) :— 6

(a) Give a man a taste—reading and the means—gratifying it, and you place him—contend—the best society—every period—history.

(b) He had little love—art and poetry, but his shrewdness showed—most—endless talk. He held his own fairly—the wits of his court and bandied repartees—equal terms—then.

6. *Either*, Show how the shifting of the accent in *three* of the following words affects their meaning :—*incense, desert, contract, concert*. 6

Or, Write sentences to illustrate the meaning of—*stationary, stationery; lightning, lightening, eminent, imminent*. 6

## SECOND PAPER

*Head Examiner*—MR. HIRANKUMAR BANERJEE, M.A.

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	„ HEMANTAKUMAR MAJUMDAR, B.A.
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	„ KSHIRODMOHAN CHAKRABARTI, M.A.
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	„ SRISCHANDRA GANGULI, M.A.
	„ TAHIR JAMIL, M.A.
	„ KIRANDHAN CHATTERJEE, M.A.
	„ AMBIKACHARAN CHAKRABARTI, M.A.
	„ DHARANIDHAR MUKHERJEE, M.A., B.T.
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	„ BHIMAPADA GHOSH, M.A.
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	„ BRAHMAKISOR MUKHERJEE, B.A.
	„ BRAJENDRAKUMAR SEN, M.A.
	„ BIBHUTIBHUSHAN BANERJEE, M.A.
	„ HARISCHANDRA MUKHERJEE, M.A.
	„ JOGENDRANATH KANJILAL, M.A.
	„ H. C. CLARIDGE, B.A.
	MR. MD. YUSUF, M.A.
	MR. NALININATH GHOSH, M.A.
	„ PRAPHULLAKUMAR DASGUPTA, M.A.
	„ PRAMATHANATH CHAKRABARTI, M.A.
	„ JANARANJAN LAHIRI, M.A.
	„ SASIPADA SAHA, M.A.
	„ DIGENDRACHANDRA DATTA, M.A.
	„ M. D. GRAY, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either, Give in your own words the story of Orpheus.*

Or, 'And thus the Treasure Valley became a garden again, and the inheritance, which had been lost by cruelty, was regained by love.' Tell briefly the story of the loss and recovery of the inheritance referred to in this sentence. 15

2. Either, Describe the mustering of the Etruscan army by Lars Porsena, and the panic caused by its march. 12

Or, Briefly relate the story of John Gilpin's ride. 12

3. Explain any *three* of the following passages :— 15

(a) Now, Roman is to Roman

More hateful than a foe,

And the Tribunes beard the high,

And the Fathers grind the low.

(b) Ev'n virtue's self by knaves is made

A cloak to carry on the trade;

And power (when lodged in their possession)

Grows tyranny and rank oppression.

(c) William Grey took up the glove in a style of manly courtesy that would have done honour to a knight in the days of chivalry.

(d) He wound us up to be mere machines of pity.

4. Explain any *four* of the following :—storied monuments; the people made a great ado over Apollo; the Martian Kalends; a train-band captain; the Milky Way; joint heirs with Christ. 8

5. Give the sense of *one* of the following extracts :— 25

(a) Breathes there the man, with soul so dead,

Who never to himself hath said,

'This is **my** own, my native land!'

Whose **heart** hath ne'er within him burn'd,

As home **his** footsteps he hath turn'd,

From wandering on a foreign strand?

If such there breathe, go, mark him well;

For him no minstrel raptures swell;

High though his titles, proud his name,

Boundless his wealth as wish can claim;

Despite those titles, power and pelf,

The wretch, concentred all in self,

Living, shall forfeit fair renown,

And, doubly dying, shall go down

To the vile dust, from whence he sprung.

Unwept, unhonoured, and unsung.

(b) The man of life upright,

Whose guiltless heart is free

From all dishonest deeds,

Or thought of vanity :

The man whose silent days .

In harmless joys are spent,

Whom hopes cannot delude,

Nor sorrow discontent—

That man needs neither towers

Nor armour for defence,

Nor secret vaults to fly

From thunder's violence.

He only can behold

With unaffrighted eyes

The horrors of the deep

And terrors of the skies.

6. Give in your own words the substance of *one* of the following passages :—

25

(a) It is not easy at this time to comprehend the impulse given to Europe by the discovery of America. It was not the gradual acquisition of some border territory, a province, or a kingdom, that had been gained, but a new world that was now thrown open to the European. The races of animals, the mineral treasures, the vegetable forms, and the varied aspects of nature, man in the different phases of civilization, filled the mind with entirely new sets of ideas, that changed the habitual current of thought and stimulated it to indefinite conjecture. The eagerness to explore the secrets of the new hemisphere became so active, that the principal cities of Spain were, in a manner, depopulated, as emigrants thronged one after another to take their chance upon the deep. It was a world of romance that was thrown open; for whatever might be the luck of the adventurer, his reports on his return were tinged with a colouring of romance that stimulated still higher the sensitive fancies of his countrymen. They listened with attentive ears to tales of Amazons, which seemed to realize the classic legends of antiquity; to stories of Patagonian giants; to flaming pictures of a land of gold where the sands sparkled with gems, and **golden** pebbles as large as birds' eggs were dragged in nets out of the rivers.

(b) Money is said to be power, which is, in some cases, true; and the same may be said of knowledge; but superior sobriety, industry, and activity are a still more certain source of power; for without these, knowledge is of little use; and as to the power which money gives, it is that of brute force, it is the power of the buldgeon and the bayonet, and of the bribed press, tongue, and pen. Superior sobriety, industry, activity, though accompanied with but a moderate portion of knowledge, command respect, because they have great and visible influence. The drunken, the lazy, and the inert stand abashed before the sober and the active. Besides, all those whose interests are at stake, prefer, of necessity, those whose exertions produce the greatest and most immediate visible effect. Self-interest is no respecter of persons: it asks not who knows best what ought to be done, but who is most likely to do it: we may, and often do, admire the talents of the lazy and even dissipated men, but we do not trust them with the care of our interests.

## MATHEMATICS

### COMPULSORY PAPER

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*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. (i) *Either*, 12912 bottles have to be packed into boxes. Each box will hold 269 bottles. How many boxes would be required?

Or, What number multiplied by 37 will give the same product as 296 multiplied by 309? 5

(ii) Either, Find the greatest number that will divide 5191 and 5854, leaving the remainder 4 in each case. 5

Or, Find the least number which being increased by 1 will be exactly divisible by 22, 17, 33, 102. 5

2. Either, Simplify  $\frac{\frac{2}{3} + \frac{3}{4}}{\frac{3}{4} + \frac{4}{5}} \text{ of } \frac{5}{6} + \frac{3\frac{1}{2}}{3\frac{1}{3}} \text{ of } 0.3$ . 5

Or, Express 0.725 of Rs. 9 6 as. + 3.9 of Rs. 11. 9 as. in rupees, annas, and pies. 5

(ii) Find, by practice or otherwise, the price of 7 mds. 13 srs. 9 chs. at Rs. 6 10 as. 8 p. per maund.

3. (i) At what rate per cent. per annum, simple interest, will Rs. 737. 1 a. 9 p. amount to Rs. 825. 9 as. in 3 years? 5

(ii) A alone can do a piece of work in 12 days, and B alone can do it in 6 days; they work together for 2 days. after which B leaves. In how many days more will A finish the work? 5

4. Either, (i) Divide  $6x^3 + x^2 - 5x - 2$  by  $2x + 1$

(ii) Find the L. C. M. of 5

$$3x^2 - 10x + 8 \text{ and } 2x^2 - 3x - 2,$$

Or, (i) Resolve into factors : 2+3

$$(1) 4x^2 - 4x - 3.$$

$$(2) a^3 - 8b^3.$$

(ii) If  $x + \frac{1}{x} = 3$ , find the value of  $x^2 + \frac{1}{x^2}$ . 5

5. Either, Simplify 10

$$\frac{b^2c^2}{(a-b)(a-c)} + \frac{c^2a^2}{(b-c)(b-a)} + \frac{a^2b^2}{(c-a)(c-b)}$$

Or, If  $\frac{b+c}{a} = \frac{c+a}{b} = \frac{a+b}{c}$ , prove that either 10

$$a+b+c=0 \text{ or } a=b=c.$$

6. Either, Solve the equations : 5+5

$$(i) \frac{3}{x+1} + \frac{4}{x+2} = \frac{7}{x+3};$$

$$(ii) 6y - x = 1,$$

$$\frac{x+y}{x-y} = \frac{3}{2}.$$

Or, The denominator of a fraction exceeds the numerator by 3, and if the numerator be increased by 7, the fraction is increased by unity. Find the fraction. 10

7. Either, (i) If two angles of one triangle are respectively equal to two angles of another, and the side adjacent to the angles in one equal to the side adjacent to the equal angles in the other, prove that the two triangles are equal in all respects. 8

(ii) A diagonal of a parallelogram is bisected. and through the point of bisection a straight line is drawn to be terminated by 5

one pair of opposite sides. Show that the straight line is bisected at the point.

Or, (i) Prove that any two sides of a triangle are together greater than the third side. 8

(ii) Prove that the difference of any two sides of a triangle is less than the third side. 5

8. Either, (i) Prove the geometrical proposition corresponding to the algebraical formula. 8

$$(a + b)^2 = a^2 + b^2 + 2ab$$

(ii) Prove that the square on a straight line is equal to four times the square on half the line. 5

Or, (i) Draw two tangents to a circle from an external point. 8

(ii) A quadrilateral is described touching a circle. Prove that the sum of any pair of opposite sides is equal to the sum of the other pair. 5

9. (i) Construct a triangle, given the base, one side, and the area. 7

(ii) Draw the graphs of 7

$$7x - 2y = 14 \quad \text{and} \quad x + 2y = 2,$$

and hence find the co-ordinates of their point of intersection.

#### ADDITIONAL PAPER.

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                  { „ SANTANUKUMAR MUKHERJEE, M.Sc.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Either, Find the square root of 0·01117249. 10  
Or, Find the value of 10

$$1 + \frac{1}{2} \cdot \frac{1}{9} + \frac{1}{3} \cdot \left(\frac{1}{9}\right)^3 + \frac{1}{5} \cdot \left(\frac{1}{9}\right)^5 + \frac{1}{7} \cdot \left(\frac{1}{9}\right)^7 + \dots$$

correct to four places of decimals.

2. Either, The monthly expenditure of a family of 40 persons on rice is Rs. 177. 8as. when it is selling at Rs. 4. 7 as. per maund. Calculate what this expenditure will be in the case of 50 persons, when rice sells at Rs. 4. 13 as. per maund, supposing the quantity of it per head is raised by one-fourth. 10

Or, A manufacturer sells goods to a dealer, and the latter to his customers, each at the same rate of profit, viz. 10 per cent. How much does a customer pay above the original cost of goods purchased by him for £605? 10

3. Either, (i) Prove that  $(ab)^n = a^n b^n$ , when  $n$  is a positive integer. 6  
(ii) Find the simplest value of 6

$$\left(\frac{a^1}{b^m}\right)^n \cdot \left(\frac{b^n}{c^1}\right)^m, \left(\frac{c^m}{a^n}\right)^l$$

Or, Solve :

$$(i) \frac{2x+1}{x+1} = \frac{x+6}{x+4}; \quad (ii) \frac{x}{3} + \frac{3}{x} = 1\frac{1}{3};$$

$$(iii) x^2 + \frac{36}{x^2} = 13.$$

4. (i) Find the sum of  $a + ar + ar^2 + ar^3 + \dots$  to  $n$  terms. 7

(ii) Either, Exhibit 0·7 as an infinite geometrical series, and thence find its simplest value as a vulgar fraction. 3+4

Or, In the following groups of terms enclosed within brackets, find the value of the  $n$ th group and the sum of the first  $n$  groups: 3+4

$$(1) + (1 + 3) + (1 + 3 + 3^2) + (1 + 3 + 3^2 + 3^3) + \dots$$

5. Either, Join successively the points (2, 0), (4, 3), (2, 5), (0, 2), and (2, 0), and calculate the area of the quadrilateral so formed. 6+8

[Take each of the smallest equal lengths on the graph paper as the unit of length, and each of the smallest squares as the unit of area.]

Or, Draw the graphs of  $y^2 + x = 0$  and  $y + x = 0$ . 8+3+3

and find the co-ordinates of their points of intersection from the diagram.

6. *Either*, (i)  $D$  is the middle point of the side  $BC$  of a triangle  $ABC$ . Prove that 8

$$AB^2 + AC^2 = 2AD^2 + 2BD^2.$$

(ii) Prove that the sum of the squares on the four sides of a parallelogram is equal to the sum of the squares on the diagonals. 5

*Or*, Draw a common tangent to two given circles, and justify your construction. 8

How many common tangents may be drawn when the circles cut one another, and how many to non-intersecting circles? 2+2

When is no common tangent possible? 1

7. *Either*, Prove that equiangular triangles are similar. 8

$ABC$  is a triangle right-angled at  $A$ , and  $AD$  is drawn perpendicular to  $BC$ . If  $AB=5$  cm., and  $AC=12$  cm., find  $BD$  and  $CD$ . 5

*Or*, Prove that similar triangles are to one another in the duplicate ratio of their homologous sides. 8

Equilateral triangles are described on the sides of a right-angled triangle. Prove that the area of the triangle on the hypotenuse is equal to the sum of the areas of the other two triangles. 5

8. Prove that the locus of a point from which tangents drawn to two given circles are equal is a straight line. 8

If  $A$  and  $B$  are the centres of the circles, and  $P$  the point where the above locus intersects  $AB$ , find  $PA$  and  $PB$ , being given that  $AB=10$  cm. and the radii of the circles 5 cm. and 3 cm. respectively. 6

## SANSKRIT

### COMPULSORY PAPER.

*Paper-Setters*— { PROF. D. K. BHANDARKAR, M.A., Ph.D.  
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Examiners—  
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 ,, RAMCHANDRA BHATTACHARYYA.  
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 PANDIT UPENDRANATH BIDYARATNA.  
 MR. KUNJALAL DATTA, M.A.  
 ,, HRISHIKES BHATTACHARYYA, M.A.  
 ,, HIMANSUNATH MUKHOTI, VIDYABHUSAN, M.A.  
 ,, RAMGATI MUKHERJEE, M.A.

(Looked over answer-papers written in Uriya character.)

MR. PRIYARANJAN SEN, M.A.

(Looked over answer-papers written in Devanagari character.)

PANDIT DHARANIDHAR SHARMA, B.A.

SRIMATI NALINIBALA DEY, M.A.

(Looked over answer-papers written in Teluga character.)

MAHAMAHOPADHYAY VEDANTABISARAD ANANTAKRISHNA SASTRI.

(Looked over answer-papers written in Marathi character.)

MAHAMAHOPADHYAY PANDIT SITARAM SASTRI.

(Looked over answer-papers written in Malayalam character.)

MM. ANANTAKRISHNA SASTRI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English (i) and any four of the following :— $5 \times 5 = 25$

(a) अत्र च महत्तां वृत्तिं भुञ्जानानां पण्डितानां पञ्चशती तिष्ठति, ततो यथा मनोरथाः सिद्धिं यान्ति, तथानुष्ठीयतामिति ।

(b) अथ ज्वलति तस्मिन् शमीकोटरेऽईदग्धशरीरः स्फुटितेक्षणः कर्णं परिदेवयन् पापवृद्धि-पिता निश्क्राम ।

(c) कच्छपी वदति—युवाभ्यां चक्षुष्टं काष्ठखण्डमेकं मया सुखेनावलम्बितव्यम्, अतो भवतो पञ्चवलेन मयापि सुखेन गन्तव्यम् ।

(d) अहो ! निर्वात-नीडगर्भावस्थिताः सुखिनः पचिष्योऽस्मान् निन्दन्ति, तद्वस्तु तावद् वृष्टेरुपशमः ।

(e) राजानं प्राङ् दैवज्ञः—राजन् ! भोजस्य भाग्योदयं वक्तुं विरिञ्चिरपि नात्मन्, कोऽहमुदरश्चरित्राद्भाषः ।

(f) राजापि तेन वाक्येन पीयूषपूरकात् इव, परब्रह्मणि लीन इव, लोचनाभ्यां कर्वायुषि सुमीच ।

(g) कुमारे सुसोत्थिने तत्पितरौ परां प्रीतिमासादितवन्तौ, सर्व्वं बन्धुवर्गांश्च हर्षिता बभूवुः ।

(h) यूयं विद्याभ्यासं कुरुत, तदा सर्व्वसुखं भविष्यति । तत् श्रुत्वा ते मरणविधिं परित्यज्य विद्यासिद्ध्यर्थं गतवन्तः ।

(i) विदितलोकापवादहत्तान्तश्च भगवान् सयदुमेन्यपरिवारः प्रसेनाश्वपदवी-  
मनुससार ।

Account for शानच् in सुज्ञानानां in (a), and expound the *samāsas* in 1+3+1 विदितलोकापवादहत्तान्तः in (i). Give the form which परित्यज्य in (h) will take if परि is elided. Give an alternate form of पितरौ in (g). Decline 1+1 the base in परब्रह्मणि in (f) in the first case-ending (प्रथमा). Derive 5+9 उदरम्भरि in (e) and हर्षिता in (g) :—

2. Explain in English with reference to the context (a) or (b) 5+2  
and (e) or (f) :— =10

- (a) ननु नामाविनीतानां विनेतासि परन्तप ।  
कथमेवंविधं पादं न त्वं शाधि हि रावणम् ॥
- (b) भुञ्जाना मानुषान् भोगान् दिव्यांश्च वरवर्षिणि ।  
न स्मरिष्यसि रामस्य मानुषस्य गतायुषः ॥
- (c) उक्तमात्रे तु वचने तथा स मृगजीवनः ।  
व्यसुः पपात मेदिन्यामग्निदग्ध इव द्रुमः ॥
- (d) मां चेदिच्छसि जीवन्तीं मातः सत्यं ब्रवीमि ते ।  
नरवीरस्य वै तस्य नलम्बानयने यत ॥
- (e) किन्तु पूर्व्वमितो गत्वा मम पित्रोर्निवेदय ।  
तयोः प्रमाणीकृतयोः सिध्यत्येतत्तवेष्टितम् ॥
- (f) कन्या मलयवत्याख्या स्वसा मेऽस्ति कनीयसी ।  
तामहं ते प्रयच्छामि, ममैच्छां मान्यथा कृथाः ॥

Give the prose order of (c). Account for the case-ending in ते 4+1  
in (d). Do you find any grammatical anomaly in the use of यत in (d) ? +1=6

3. (a) Substitute one word for any two of the underlined portions :— 2

- (i) शब्दं कुर्व्वाणास्ते गृहम् गतवन्तः ।
- (ii) एते गौडा अस्माभिर्निर्मिताः ।
- (iii) अथ स महति अरण्ये प्रस्थितः ।
- (iv) पक्षिणां मेलनं कृत्वा गतः ।

(b) Use a derivative word for two of the underlined portions :— 2

- (i) जगदिदं जलेन व्याप्तमासीत् ।

(ii) सुवर्णस्य विकारोऽयं घटः ।

(iii) स हि तर्क वेत्ति ।

4. Form adjectives from the roots or bases (as the case may be) of the underlined nouns, and form nouns from the roots of the underlined adjectives. (Attempt only three) :—

(a) तच्च स भिद्दिन निहतं मृगमेकं ददर्श ।

(b) रत्नावतो नाम काचित् नगरी आसीत् ।

(c) अधुना पलायनमपि अयुक्तम् ।

(d) चौरिण तस्य धनस्य अपहरणम् कृतम् ।

(e) कालिन स ब्रह्मोऽभवत् ।

(f) अण्डानि मे नष्टानि ।

(g) कुपितः सः अन्यत्र गतः ।

(h) परार्थं जीवनमपि उत्सृजेत् ।

5. (a) Change the voice of either (i) or (ii) :—

(i) विप्रेणोक्तम् — नायं श्वा, यज्ञच्छागोऽयम् ।

(ii) स राजावाच, त्वया क्रन्दनानुसरणम् क्रियताम् ।

(b) Disjoin the sandhi either of (i) or (ii) :—

(i) तच्छ्रुत्वा विप्रेणोक्तम् कांस्यं हितोयः ।

(ii) एतच्छ्रुत्वा स व्याघ्रः सव्यथोऽचिन्तयत् ।

6. (a) Give the लङ् first person of श्रु ; or लोट् second person of अस् (to be); or लृट् third person of दा (in आत्मनेपद).

(b) Decline the base अस्मद् in the fifth case-ending or सर्व्व (in feminine) in the sixth case-ending.

7. Correct either (a) and (c) or (b) and (d) :—

(a) अन्व परिवायतु मां अस्मात् विपदात् ।

(b) सभातको रामः सर्व्वान् मातृन् प्रणत्वा वनाय प्रतस्थौ ।

(c) कदापि मिथ्यां मा वद, सत्यं हि सतताया निदानम् ।

(d) अहो ! धिक् सत्त्वमन्यायाचरणं कुर्व्वतो ।

8. Translate any five of the following into Sanskrit :—

(a) Having collected some flowers from the garden for worship he at once set out.

(b) There lived in old time a great king who founded for his glory a great temple.

(c) While he was practising penance there, a demon appeared before him all of a sudden.

(d) So a wise man wishing his own welfare should place no confidence in a wicked person.

(e) Then I and my relations came out hearing the cries, and I found the lady in an unconscious state.

(f) Then he prostrated himself at the feet of the hermit and began to appease him.



(g) So the three brothers fell to quarrelling with one another and went immediately to the court.

(h) In course of time his fame reached the ears of the king and the king often invited him.

### ADDITIONAL PAPER.

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MAHAMAHOPADHYAY PANDIT SITARAM SASTRI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Narrate in English either the story of जीमूतवाहन or the story of धर्मबुद्धि and पापबुद्धि. 10

2. Translate any two of the following verses into English :— 5×2=10

(a) यदन्तरं काञ्चनसीसलोद्भयोर्दन्तरं चन्दनवारिपङ्क्तयोः ।

यदन्तरं हस्तिविडालयोर्धने तदन्तरं दाशरथेस्तदैव च ॥

(b) त्वं चापि रत्नं नारीणां नरेषु च नलो वरः ।

विशिष्टाया विशिष्टे न सङ्गमो गुणवान् भवेत् ॥

(c) जानामि तात ! यद् भावा भवेऽस्मिन् क्षणभङ्गुराः ।

स्थिरं तु महतामेकमाकल्पमसलं यशः ॥

3. Translate into English any three of the following extracts :— 10×3=30

(a) विद्वत्त्वं च नृपत्वं च नैव तत्त्वं कदाचन ।

स्वदेशे पूज्यते राजा विद्वान् सर्व्वेव पूज्यते ॥

वरमेको गुणी पुत्रो न च मूर्खश्चतैरपि ।

एकश्चन्द्रस्तमो हन्ति न च तारागणैरपि ॥

(b) अस्ति तदरथे कर्पूरतिलको नाम हस्ती । तमवलोक्य सर्व्वे शृगाला-  
श्चिन्तयन्ति स्म । यद्यद्यं केनाप्यपायेन स्रियते तदास्माकमेतद्देहेन मासचतुष्टयस्य  
भोजनं भविष्यति । तत्तेकेन शृगालेन चिन्तितम् मया बुद्धिप्रभावादस्य मरणं  
साधयितव्यम् ।

(c) अस्ति वाराणस्यां कर्पूरपटो नाम रजकः । स चैकदा निर्भरं प्रसुतः ।  
तदनन्तरं द्रव्याणि हर्त्तुं तद्गृहं चौरः प्रविष्टः । तं चौरमवलोक्य प्राङ्गणे उपविष्टः  
गर्हभः रजकस्य श्वानमाह—सखे भवतस्त्वादयं व्यापारः ।

(d) स्वामिन् ! समस्तवनं धात्वा समागता वयम् । परं न किञ्चित् सत्त्व-  
मासादितम् । तत् किं कुर्व्वां वयम् ? साम्प्रतं बुभुक्षया पदमेकमपि प्रचलितुं न  
शक्ताः । तद् यदि देवादेशो भवति तदा कस्यापि अनुचरस्य मांसेन पथक्रिया  
क्रियते ।

(e) अहो ! किमेतत् ? महता कष्टेनोपार्जितं वित्तं हेलया कापि गतम् ।  
तद्यर्थ्ययमः अकिञ्चनः कथं मे सुखं दर्शयिष्यामि ? इति निश्चिन्त्य शोकाकुलचित्तः  
रथोपवनं तदेव पत्तनं गतः ।

(f) अथ मकरी प्राह—त्वया कदाचिदपि मम वचनं नाग्यथा कृतम् । यदि  
तस्य वानरस्य हृदयं न भक्षयामि तदा प्रायोपवेशनं कृत्वा प्राणान् त्यक्त्यामि । एवं  
तस्या निश्चयं ज्ञात्वा, किं करोमि कथं स मे वध्यो भवति, इति चिन्तयन् वानरपार्श्वम्  
अगमत् ।

4. (a) Form a sentence to show the use of the root कृ in आत्मनेपद 3  
in the active voice.

(b) What is a सम्प्रदानकारक ? How do you distinguish between 3  
the two senses in the use of the root दा in विप्राय गां ददाति and रजकस्य  
वस्त्रं ददाति ?

(c) What is called a द्विगुसमास ? Form a sentence to illustrate 3  
its use.

(d) What is an अव्ययीभावसमास ? Form a sentence to illustrate 3  
its use.

(e) What is a नामधातु ? Form a sentence to illustrate its use. 3

5. Re-write the following correctly :— 10

नमः हरिम् । श्रीपत्या तेन प्रथोवि रक्षितम् । हरिभक्तं धनं देहि । वधूना  
प्रियासखिसर्जितम् । स न मां कृष्यति, अहन्तु तस्यै नाभिकृष्यामि ।

6. Translate any five of the following passages into Sanskrit :— 25

(a) The sons of Dhritarāshṭra gambled with the sons of Pāṇḍu and deprived them of all their wealth.

(b) Then said Yudhishṭhira to them, 'You should not follow us, we are now without wealth and cannot give you food.'

(c) If I were at Hastināpur, I should say to Dhritarāshṭra that it was not proper to deprive the Pāṇḍavas of their wealth.

(d) How many times in the day dost thou milk cows?

(e) Those who thoughtlessly kill animals never enjoy happiness.

(f) The Mauryas ruled the earth after the Nandas for a long period.

(g) I kept my money in that house that the king's men might not take it.

## PALI

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Mr. LALITKUMAR BARUA, M.A.

## COMPULSORY PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. What do you understand by Jātaka and Bodhisatta? 6
2. Relate the Jātaka which was told in connexion with "Passa saddhāya sīlassā' ti." 10

3. Translate any *three* of the following :—

15

(a) So mahantena parivārena vaddhanto soḷasavassakāle yeva niyyā-makasiṃpe nipphattim patvā aparabhāge pitu accayena niyyāmakajettako hutvā niyyāmakakammam akāsi, paṇḍito ñāṇasampanno abosi, tena ārūḷhaṇāvāya vyāpatti nāma natthi

(b) Atha naṃ aparabhāge pitari kālakate mātā kuṭumbam vicārenti āha : “tāta, tayā dullabhamanussasattam laddham, dānam debi, silam rakkha, uposathakammam kara, dhammam suṇāhīti”

(c) Ettakā paṭhavipālā Bodhisattakule vuttā  
Aniccā vata saṃkhārā uppādayadhammino  
Uppajjitvā nirujjhanti, tesam vupasamo sukhoti.

(d) Viseso pañcehi vassehi Bimbisārassa Gotamo  
Paññāsaṇca dve vassāpi rajjam kāresi khattiyo,  
Sattatimsampi vassāni sahabuddhehi kārayi.

4. Write notes on—*satta bojjhaṅgā, ariyo aṭṭhaṅgiko maggo, dasa sikkhāpadāni.*

9

5. Either, What are the acts of welfare as told in the *Maṅgala-sutta*?

10

Or, How would you cultivate the feeling of love (*mettā*) towards all beings?

6. (a) Analyse the *sandhis* in any *two* of the following :—*eka-nāma, tyatthu, dhiratthu.*

2

(b) Analyse the *samāsas* in any *two* of the following :—*nāmarū-pam, ruddadassano, piṭṭhipāsāne.*

2

(c) Decline *bhagavā, bhikkhu*, and *nadī* in accusative, instrumen-tal, and locative cases, singular and plural.

6

(d) Conjugate the roots of *dadāti, karoti*, and *gacchati* in aorist past tense.

6

7. Correct the errors in any *three* of the following, giving reasons for your answer :—

9

(a) Kassa kāraṇe maṃ pahāyitvā gamituṃ icchasi.

(b) Satam santhavam kubbiṭha, esa vacanam tvam na saddheyyāti.

(c) Mama vinā ko aparo gati tumhesu vattati.

(d) Pitā pana attanam putte vibhetti n'ettha ṭhānam vijjati.

8. Translate into Pāli any *four* of the following :—

25

(a) He said thus : “I shall go to your house and tell your mother that you are well.”

(b) You are our friends and benefactors. You have done im-mense good to the country.

(c) Cultivate the feeling of love towards all beings. Let all men be happy. Let there be peace.

(d) Do not bear ill will towards any. Be friendly to all as a mother to her only child.

(e) It is by restraint that independence can be earned. Do not increase your desire if you want contentment.

### ADDITIONAL PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. (a) Translate into English any *two* of the following extracts :— 10

(i) Tassa sāventassa dve sāvanā adhiṇṇasetvā tatīyasāvanāya eko kāko ṭhāya “aṭṭiṭṭha tāva, etassa imasmiṃ rājābhisekakāle evarūpam mukham

kuddhassa pana kidisaṃ bhavissati, iminā hi kuddhena olokitaṃ mayam tatta-kapāle pakkhittailā viya tattha tatth'eva bhijjissāma."

(ii) Atha naṃ sattaratanavacitte pañjare t̥hapetvā macchamapsaphalāpha-lehi c'eva madhulājasakkharāpānakādīhi ca paṭijaggimsu Mayūrarāja lābha-ggayaṃ aggaṃ pattaṃ jāto. Tassāgatakalato paṭṭhāya kākassa lābhasakkāro pari-hāyi, koci naṃ oloketuṃ pi na icchi. Kāko khādāniya bhojanīyaṃ alabhamāno "kā" "kā" ti vassanto gantvā ukkārabhūmiyaṃ otari.

(iii) Nidhiṃ nidheti puriso gambhīre odakantike  
Atthe kicce samuppanne atthāya me bhavissati,  
Rājato vā duruttassa corato piṇṭassa vā  
Inassa vā pamokkhāya dubbhikkhe āpadāsu vā  
Etadatthāya lokasmiṃ nidhi nāma nidhiyati.

(b) Analyse the compound in the italicized word in 1 (ii). 2

(c) Parse *atthāya* in 1 (ii). 1

(d) Derive *sāventassa* in (i)

2. Either, Reproduce the "Novice's questions" (*kumārapañhā*) 5  
as given in the *Khuddakapāṭha*.

Or, Enumerate the ten points of indulgence claimed by the  
Vajjian monks of Vesālī.

3. (a) Analyse the *sandhis* in three of the following :—*sabbhire-* 3  
*va*, *ullokite*, *duruttassa*, *etadatthāya*, and *anussarantassa*.

(b) Decline any three of the following bases in the dative and 6  
locative cases in both the numbers :—*attā*, *rāja*, *go*, and *ratti*.

(c) Frame sentences in Pāli to illustrate the use of any three 6  
of the following :—

(i) a locative absolute;

(ii) a pronominal adjective;

(iii) an adjective in the superlative degree;

(iv) a present participle used as an adjective.

(d) How are past participles formed in Pāli? Give the past 5  
participles of four of the following roots :—*dā*, *thā*, *kar*, *car*, *nad*,  
and *tar*.

(e) Name the different ways of formation of "denominative 6  
verbs," and give an example of each.

4. Translate into English any two of the following extracts :— 30

(a) Ath'eko "Kharadāṭhiko" nāma yakkho Mahāpurisassa dānappiṇṇasayataṃ  
sutvā brāhmaṇavāṇṇena upasaṃkamitvā Mahāsattam dve dārake yāci. Mahā-  
satto haṭṭhapahattho ndakapariyantam paṭhaviṃ kampento dve pi dārake adāsi.  
Yakkho caṃkamanakotiyam t̥hatvā passantass'eva Mahāsattassa mūlakalāpaṃ  
viya dārake khādi. Mahāsattassa yakkham oloketvā anumattaṃ pi domana-  
ssam na uppajji. "Sudinnam vata me dānam" ti cintayato pana assa sarīre  
mahantaṃ pītisomanassam udapādi.

(b) Sakko vaḍḍhakivaṇṇaṃ nimminitvā vāsīpharasulhattho Mahāsattassa  
purato paturabosi "atthi nu kho kassaci, bhatiyā kattabbaṃ" ti āha. Mahā-  
satto disvā "kiṃ kamamaṃ karissasi" ti āha. "Mama ajānanasippaṃ nāma  
n'atthi, geham vā maṇḍapaṃ vā yo yaṃ kareti tassa taṃ katuṃ jānāmi" ti.  
"Tena hi mayham kamamaṃ atthi" ti. Kiṃ ayya'ti. "Svātānāya me  
satasaḥassabhikkhū nimantitā tesam nīlāna-maṇḍapaṃ karissasi ti."

(c) Rañño Mahilāmukhe nāma maṅgala-batthi abosi silavā ācārasampanno,  
na kiñci vihettheti. Ath'ekadivasam tassa sālāya sampe rattibhāgasamanantare  
corā āgantvā tassa avidūre nisinnā mantayimsu. So tesam vacanaṃ sutvā  
"mam sikkhāpeti" ti saññāya kakkhalo pharusso ahoṣi. "Mahilāmukho  
ummattiko jāto, diṭṭha-diṭṭhe māreti" ti rañño ārocesi. Rājā Bodhisattam  
pabini: "gaccha Paṇḍita jānāhi kena kāraṇaṃ so duṭṭho jāto" ti.

## 5. Translate into Pāli :—

25

At Taxila, in the kingdom of Gāndhāra, there lived in the olden days a learned man of great fame, who had many pupils. One day, the pupils set out for the wood to get fuel for their teacher. Among them there was one who was very lazy. In the wood he came on a big tree which he fancied to be dry. And he thought of taking a nap first and afterwards climbing the tree to break a few branches and carry them home as fuel.

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## COMPULSORY PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

## 1. (a) Translate into English :—

16

A.

قل اعوذ برب الناس - ملك الناس - اله الناس - من شر  
الوسواس الخناس الذي يوسوس في صدور الناس - من الجنة  
والناس \*

B.

الم نشرح لك صدق و رضعنا عنك و زرك الذي انقض ظهرك  
و رفعنا لك ذكرك - فان مع العسر يسرا ان مع العسر يسرا - فاذا  
فرغت فانصب و الى ربك فارغب \*

(b) Account for the repetition of **ان مع العسر يسرا** and why is **يسرا** the **اسم ان** placed after the **خبر ان** ?

2. Answer any *five* of the following :—

(a) Give **اعراب** to the extract A, Question 1. 5

(b) State the **تعليل** of any *five* of the following :— 5

**اعوذ - قيل - اطلال - قمت - تجب - نستعين - يكون**

(c) Enumerate **حروف النداء** and give examples in each case. 5

(d) Conjugate **مضارع معروف** 5

(e) Mention the **افعال ناقصة** with some examples. 5

(f) Construct *five* sentences from the following :— 5

**وقع - خرج - اصاب - صاح - يجب - تكلم - سمع \***

1. Translate into English any *one* of the two following :— 9

A.

حكى ان صيادا كان فى بعض الغلجان يصيد فيه السمك فى زروق فرأى ذات يوم فى ارض الماء صدفة كاللؤلؤ حسنا فتوهمها جوهرا له قيمة وكان قد القى شبكته فى البحر فاصاب سمكة كانت تورت يومه فتركها و ذهب فى الماء لياخذ الصدفة - فلما اخرجها وجدها فارغة لا شئ فيها مما ظن فندم على ترك ما فى يده للطمع و تأسف على ما فاته - فلما كان فى اليوم الثانى ذهب الى جانب آخر بعيدا عن ذلك المكان و القى شبكته - فاصاب حوتا صغيرا و رأى ايضا صدفة سنية فلم يلتفت اليها و ساء ظنه بها فتركها فمر بها بعض الصيادين فاخذها فوجد فيها دره تسارى اموالا \*

B.

ارسل قيصر رسولا الى عمر بن الخطاب رضى الله عنه - لينظر احواله و يشاهد افعاله فلما دخل المدينة سال اهلهما و قال اين ملككم - فقالوا ما لنا ملك بل لنا امير قد خرج الى ظاهر المدينة - فخرج الرسول فى طلبه - فراه نالما فى الشمس على الارض فوق الرمل العار و قد وضع درته كالرسادة و العرق يسقط من جبينه الى ان قد بل الارض - فلما راه على هذه الحالة وقع الخشوع فى قلبه و قال رجل يكون

جميع الملوك لا يقر لهم قرار في هيئته و تكون هذه حالته و لكن يا  
عمر عدلت فزمت - و ملكذا يحور و لا جرم انه لا يزال ساهرا خائفا \*

4. Explain in English :—

7

*Either,*

بقدر الكد تكتسب المعالي \* و من طلب العلى سهر الليالى  
يغوص البحر من طلب الآلى \* و يعطى بالسعادة و النزال  
و من طلب العلى من غير كد \* اضاع العمر فى طلب المعال

*Or,*

ترد رداء الصبر عند النوائب  
تدل من جميل الصبر حسن العواقب  
و كن حافظا للوالدين و ناصرا  
لجارك ذى التقوى و اهل الاقارب  
و كن طالبا للرزق من باب حلة  
تضاعف عليك الرزق من كل جانب

5. Briefly reproduce in English the story of

7

الشيخ المحتال و المرأة

6. Correct the following :—

7

رائت اخى على ذلك الحالة - اتعرف ما انا - كان الشيخ شاعر  
مشهور - صار الفقير غني - ان الحكماء قال قولا سديدا - القى  
الصيد شبكته فاصاب حوت - جاء رجلين الى زيد \*

7. Translate into Arabic :—

25

- The cock gets up very early in the morning.
- The sun has risen in the sky.
- Fire is very useful for cooking.
- The dog is a very faithful animal.
- You have five fingers on one hand.
- I shall return the basket to you after sixteen days.
- There are ten trees in this road.
- What bird is that I see on this tree?
- Oh man! Tell me who you are.
- Honesty is the best policy.



## ADDITIONAL PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English either A or B :—

12

A.

(a) والتين و الزيتون و طور سين و هذا البلد الامين - لقد خلقنا الانسان فى احسن تقويم - ثم رددنه اسفل سافلين - إلا الذين آمنوا و عملوا الصالحات فلهم اجر غير ممنون - فما يكذبك بعد بالدين - ليس الله باحكم الحاكمين \*

(b) و لا يحيطون بشىء من علمه إلا بما شاء - وسع كرسيه السموات و الارض و لا يؤده حفظهما - و هو العلى العظيم \*

B.

ضالت ناقة الاعرابى فى ليلة مظلمة - فاكثر فى طلبها فلم يجدها - فلما طلع القمر و انبسط نوره رجعها إلى جانبه ببعض الوردية - و قد كان اجتاز بموضعها مراراً فلم ير لشدة الظلام - فرفع راسه الى القمر و قال ماذا اقول و قولى فيك ذو خطر - و قد كفيتنى التفصيل و الجملا ان قلت ما زلت مرفوعاً فانت كذا - ار قلت زانك ربى فهو قد فعلا \*

2. Either, Give a description of الامام العادل

8

Or, Write the story of على شار as mentioned in your text book.

3. Translate into English :—

30

(a) ان رجلاً نزل فى مركب مع جماعة و لم يزلوا سائرين حتى طلع عليهم ريم - فوجههم ذلك الريم الى ارض من اراضى الله تعالى - و كان ذلك فى سواد الليل - فلما اشرق النهار خرج عليهم من مغارات تلك الارض اقوام سود الالوان عراة الاجساد كأنهم وحوش لا يفقهون خطاباً \*

(b) قال النبي صلى الله عليه وسلم لقمة واحدة فى بطن جائع خير من الف ركعة - من جلس عند مذاكرة العلم احب الى الله تعالى ممن يتصدق بعشرة دراهم - كل قلب مشتاق إلى الجنة و الجنة

مشتاق إلى أربعة اقوام - اولها من اطعم جائعاً و الثاني من كسى عرباناً و الثالث من صام شهر رمضان و الرابع من يقرأ القرآن - من زارني بعد مماتي فكانما زارني في حياتي \*

4. Answer any four of the following :—

25

(a) Re-write the extract (a), Question 3, with vowel-points

(اعراب)

(b) Give the **باب** and **تعليل** of the following :—

**ميزان** and **مقيم** - **لم يكن** - **ارم** - **قام**

(c) Define **تميز** and **حال** and give examples.

(d) Form sentences with the following words :—

**عشرون** and **كنت** - **ظنوا** - **ليست** - **لعل**

(e) Give the opposite numbers of the following with **اعراب**

**كبرى** and **كبيرا** - **ملك** - **انصار** - **شريف**

(f) Define **جمع** and **صفت** What are the conditions of **غير منصرف**

being **غير منصرف** Give examples.

(g) Correct with full **اعراب**

(١) **كن محموداً عالماً \***

(٢) **جاءني مسلمون المدينة \***

(٣) **ذهب الليل و جاءت النهار \***

(٤) **ما اسم ابرك يا عبد الله \***

(٥) **عندي سبع كقاب و مائة دراهم \***

5. Translate into Arabic any ten of the following :—

25

(a) I do not worship anybody beside God.

(b) Is that person very tall?

(c) All people respect the learned man.

(d) How many boys are there?

(e) Here are one hundred and seven boys.

(f) This girl is very intelligent.

(g) If you come to my house, I will go out with you.

(h) Surely Abdullah is a rich man.

(i) The boys are reading in the school.

(j) Mahmūd did not go to school yesterday.

(k) Do good deeds and never tell a lie.

(l) This woman has a son.

(m) She was killed at night.

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## COMPULSORY PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into simple English one of the following passages :— 10  
A.

عاقل آن باشد که ار شاکر بود  
و آنکھی بر نفس خود قادر شود  
هر که خشم خود فرو خورد اے جوان  
باشد ار از رستگاران جهان  
آن بود ابله ترین مردمان  
کز پیء نفس و هوا باشد دران  
هر که اورا نفس توسن رام شد  
از خردمندان نیکو نام شد  
با ریاضت نفس بدرا گوش مال  
تا نیندازد ترا اندر وبال

B.

یکی طعن و تشنیع میزد بسی \* به آزاد مردی حقیقت رس  
 سخن چین سخنها بار باز گفت \* ازان ژاژخائی چو گل بر شگفت  
 بشکرانه رخسار برخاک سود \* به یزدان سپاس فراوان نمود  
 پس آنکه چنین گفت آزاد مرد \* که می باید در جهان فخر گرد  
 که یاد چو من ناسزا بدد \* نمود است سالار فرخنده.

2. Who is the author of the extract A of Question 1? Give a short account of his life. 7

3. Give the substance of the following either in English or Persian :— 10

ای رسالت را علم افراخته  
 دست تو تیغ شریعت آخته  
 مرکب کو بر مکان بنهاد پائے  
 قدر تو بر لامکانش تاخته  
 نه قبائی چرخ را خیطا صنع  
 خاص بهر قامت پرداخته  
 جز خدا کس حد تو نشناخت زانک  
 کس خدا را همچو تو نشناخته

4. Answer any three of the following :—

18

(a) Give the significance of the following suffixes and form words therewith :—

(گر - سار - بان - آنه - زار - کده)

(b) Give the meanings and opposite numbers of the following words :—

(ملوک - وزیر - غازی - مساکین - حکیم - خواص)

(c) Enumerate the significances of (یائی معروف)

(d) Form sentences to illustrate the use of—

(آتش زدن - فرو گذاشتن - براه شدن - تلف شدن)

5. Translate any two of the following into English :—

14

A.

هرمرا گفتند که از وزیران پدر چه خطا دیدی که بند فرمودی -  
 گفت خطائی معلوم نکردم لیکن دیدم که مهابت من در دل ایشان  
 بیکران است و بر عهد من اعتماد کلی ندارند - ترسیدم که از بیم گزند  
 خویش آهنگ هلاک من کنند \*

## B.

مالدارے را شنیدم کہ بہ بخل چنان معروف بود کہ حاتم طائی بہ کرم - ظاہر حالش بہ نعمت دنیا آراستہ - و خست نفس در نہادش چنان متمکن کہ نانے بہ جانے از دست ندادے - و گریہ ابو ہریرہ را بہ لقمہ نفواختی و سگ اصحاب کعبہ را استخوان نینداختی \*

## C.

در مجلس کسروی سہ تن از حکما جمع آمدند - فیلسوف روم و حکیم ہند و بزرچمہر سخن بہ آنجا رسید کہ سخت ترین چیزها چیست - رومی گفت پیوری و سستی با ناداری و تنگدستی ، ہندی گفت تن یمار بہ اندرہ بسیار ، بزرچمہو گفت نزدیکی اجل با دوری از حسن عمل ، ہمہ بقول بزرچمہر رضا دادند \*

6. Write notes on ( - گریہ ابو ہریرہ and حاتم طائی )

6

7. Correct the errors in the following :—

6

ملک این کلام خوش آمدند - دامن از کجا آرد کہ جامہ نداریم -  
ما فردا بنارس رفتہ بودم - ارشان چیز خوب نیستند -

8. Translate into Persian :—

25

I went to the maidan yesterday to see the game. There was a large crowd of spectators. There were men of all communities present. The two teams were equally strong. The game continued for half an hour when the rain set in. The game, therefore, had to be stopped, and the spectators went back disappointed.

## ADDITIONAL PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any one of the following extracts :—(a) 12

(a) دریشی با پادشاہی طریقہ اختلاط داشت - روزی در پیشانی  
ار اثر گرانی معاینہ کرد - ہر چند تجسس کرد جز کثرت تردد و بسیاری  
آمد و شد سببی دیگر ندید - دامن اختلاط در چید - روزی بادشاہ با رمی

در ممری اتفاق ملاقات افتاد - زبان بمقالات بکشد که ای درویش موجب چیست که از ما بریدی و قدم از آمد و شد کشیدی - گفت موجب آنکه دانستم که از سبب نا آمدن سوال به که از جهت آمدن اظهار ملال \*

(b) چراغی که بیوه زنی بر فروخت  
 بسی دیده باشی که شهری بسوخت  
 ازان بهره رزتر در آفاق کیست  
 که در ملکرانی بانصاف زیست  
 چو نوبت رسد زینجهان غریتش  
 ترحم فرستند بر تربتش  
 بدر نیک مردم چو می بگذرند  
 همان به که نامت به نیکی برند  
 خدا ترس را بر رعیت گمار  
 که معمار ملک است و پرهیزگار  
 بداندیش تست آن و خونخوار خلق  
 که نفع تو جوید در آزار خلق

2. Either, Write in your own words an account of

8

رمایای چنگیز خان بفرزندان خود

Or, Write a short account of the life of شیخ علی حزین

3. Translate into English :—

30

شاهزاده شاپور سوار اسپ شده روزی برای سیر و تماشا باطراف باغهای شهر رفت - در یکی از باغات دید که مردی بسیار پیر و نانوان با کمال زحمت مشغول باغبانیست و درخت خرمائی را در زمین می نشاند - نزدیک او رفته از اسپ پیاده شد و برو سلام کرد و گفت - ای پیر مرد با این حالت پیری و ناتوانی چه میکنی و چرا اینقدر بخود زحمت میدهی - پیر مرد گفت ای جوان انسان تا نفس میکشد باید مشغول زحمت باشد و از دست رنج خود لقمه نانی پیدا کرده بی منت دیگری با عزت زندگانی نماید و نیز بقدر مقدور برای دیگران زحمت کشد و

خدمت نماید - شاپور پرسید این چه درخت است که می نشانی  
گفت درخت خرماست - شاپور پرسید پس از چند سال بر خواهد داد -  
گفت بعد از ده سال - شاپور گفت پس میوه اش که بتو نمیرسد - چرا  
اینقدر زحمت میکنی - پیر دانا گفت ای پسر عزیز - دیگران برای ما  
کاشتند و ما میوه اش خوردیم - ما هم باید بکاریم تا دیگران از ثمره اش  
بهره مند گردند \*

4. Answer any three of the following :—

15

(a) Explain the grammatical construction of the following compound words and give the meaning of their component parts :—

سیلاب - پاسبان - شرمگین - خاکسار - عالم پناه

(b) What auxiliary verbs are used as principal verbs? Give instances to illustrate their uses.

(c) Give the opposite numbers of—

مائده - قدم - مهم - دکان - حکمت - عمر - راقعه - عین -  
رسل - متاع - نعم \*

(d) Construct sentences to illustrate the use of the following :—

سرنگون - بغایت - سراپا - لرزید - ریخت

(e) Correct or justify :—

بسیار باران افتاد - او خوابیده کرده بود - من کاغذ میدارم - در راه  
او را دیده کردم - زید ده ساعت آمد \*

5. Translate into Persian :—

35

A girl, five years old, got two pice from her mother to buy sweets. She bought some, but, when she was coming home, she saw at the door of her house a poor lad, who said he had not eaten anything for two days. The girl was sorry to hear this and gave him the sweetmeats she had purchased. She was very glad that she was able to help a poor hungry lad. When the mother came to know of this, she kissed her child and gave her an anna for her kind action.

## LATIN

*Paper-Setters*— { MR. NALINIMOHAN CHATTERJEE, M.A.  
 „ C. E. LOMAX.

*Examiners*— { MR. NALINIMOHAN CHATTERJEE, M.A.  
 „ NIRMALCHANDRA MITRA, M.A.

## COMPULSORY PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

## 1. Translate into English :—

25

- (a) Ex illo fluere ac retro *sublapsa* referri  
 spes Danaum, fractae vires, aversa deae mens.  
 Nec dubiis ea signa dedit Tritonia monstris.  
 Vix positum castris simulacrum : arsere coruscae  
 luminibus flammæ arrectis, salsusque per artus  
 sudor lit, terque ipsa solo (mirabile dictu)  
 emicuit parmanque ferens hastamque trementem.  
 Extemplo temptanda fuga cauit aequora Calchas,  
 nec posse Argolicis excindi Pergama telis  
 omina ni repetant Argis numenque reducant  
 quod pelago et curvis secum avexere carinis.
- (b) Talia vociferans gemitu tectum omne replebat,  
 cum subitum dictuque oritur mirabile monstrum.  
 Namque manus inter maestorumque ora parentum  
 ecce levis summo de vertice visus Iuli  
 fundere lumen apex, tactuque innoxia mollis  
 lambere flamma comas et circum tempora pasci  
 Nos pavidi trepidare metu crinemque flagrantem  
 excutere et sanctos restringere fontibus ignis.  
 At pater Anchises oculos ad sidera laetus  
 extulit et caelo palmas cum voce tetendit :  
 'Iuppiter omnipotens, precibus si flecteris ullis,  
 aspice nos, hoc tantum, et si pietate meremur,  
 da deinde augurium, pater, atque haec omina *firma*.'

(c) Exigua parte aestatis reliqua Caesar, etsi in his locis, quod omnis Gallia ad septentriones vergit, maturae sunt hiemes, *tamen in Britanniam proficisci contendit, quod omnibus fere Gallicis bellis hostibus nostris inde sumministrata auxilia intellegebat et, si tempus anni ad bellum gerendum deficeret, tamen magno sibi usui fore arbitrabatur, si modo insulam adisset et genus hominum perspexisset, loca, portus, aditus cognovisset; quae omnia fere Gallis erant incognita.*

(d) At Caesar, etsi nondum eorum consilia cognoverat, *tamen et ex eventu navium suarum et ex eo quod obsides dare intermiserant fore id quod accidit suspicabatur. Itaque ad omnis casus subsidia comparabat. Nam et frumentum ex agris cotidie in castra conferebat et, quae gravissime adflictae erant naves, earum materia atque aere ad reliquas reficiendas utebatur et quae ad eas res erant usui ex continenti comporari iubebat. Itaque, cum summo studio a militibus administraretur, XII navibus amissis, reliquis ut navigari commode posset effecit.*

2. Scan the first *two* lines of passage (a) in Question 1; and translate with notes on the grammar of the words in italics :—

(a) Sensit medios *delapsus* in hostes.



(b) Et, si fata deum, si mens non laeva fuisset,  
*inpulerat* ferro Argolicas foedare latebras.

(c) *Ardentesque oculos* suffecti sanguine et igni.

3. Translate, explaining the allusions :—

(a) Hos Ithacus velit, et magno mercentur Atridae.

(b) Iam summas arces Tritonia, respice, Pallas  
insedit, nimbo effulgens et Gorgone saeva.

(c) Vadimus inmixti Danaïd haud numine nostro.

4. Parse fully the words italicized in Question 1 :—*sublapsa, firma, adisset, fore, usui.* 5

5. *Either*, Give an account of Sinon's treachery. 5

*Or*, Describe as clearly as you can Caesar's method of bridging the Rhine.

6. Give the genitive plural of—*bos, nubes, munus*; and the dative singular of—*senex, dives, arcus*; give the other degrees of comparison of—*magis, pius, minimus*; write out the future simple of *eo*, the imperfect subjunctive passive of *fero*, the present subjunctive passive of *nun- tio*; give the principal parts of—*remio, relinquo, vivo.* 5

7. Translate into English :— 25

(a) Ille habuit fidamque manum sociosque fideles :

me profugum comites deseruere mei.

ille suam lactus patriam victorque petebat :

a patria fugi victus et exsul ego.

illi corpus erat durum patiensque laborum :

invalidae vires ingenuaeque \* mihi.

ille erat assidue saevis agitatus in armis :

assuetus studiis mollibus ipse fui.

\* *ingenuus* = delicate.

(b) In hoc summo periculo nulla civitas Atheniensibus auxilio fuit praeter Plataeenses. Nam Lacedaemonii responderant missuros quidem sese auxilium, sed ante plenam lunam exire nefas sibi esse. Plataeenses mille miserunt milites, ita ut horum adventu decem milia armatorum complerentur. Parva haec manus admirabili pugnandi cupiditate flagrabat. Egressi ex urbe loco idoneo castra posuerunt, unde ingentem barbarorum exercitum conspiciebant.

8. Translate into Latin :— 25

(a) They sent her the most beautiful flowers they had.

(b) He was so angry that he did not know what he was saying or what he was doing.

(c) If you will allow me to help you I will explain to you what you have to do.

(d) In the morning of the next day, leaving six cohorts and two hundred cavalry to protect the camp, he set out with the rest of his forces to lay waste the enemy's territory.

(e) A merchant, who was attacked by three robbers, defended himself so valiantly that the robbers had to kill him in order to get possession of the money he was carrying. If the merchant had given up the money to the robbers, he would not have been killed by them.

ADDITIONAL PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :— 5  
 Ecce ! manus iuvenem interea post terga revinctum  
 pastores magno ad regem clamore trahebant  
 Dardanidæ; qui se ignotum venientibus ultro  
 hoc ipsum ut strueret, Troiamque aperiret Achivis,  
 obtulerat, fidens animi, atque in utrumque paratus,  
 seu versare dolos, seu certae occumbere morti.  
 undique, visendi studio, Troiana iuventus  
 circumfusa ruit, certantque inludere capto.  
 Scan the last line of the above passage. Give grammatical  
 notes on—*manus revinctum*, *fidens animi*, and *certant inludere*. 5
2. Translate into English :— 5  
 Exigua parte aestatis reliqua Caesar, etsi in his locis, quod  
 omnis Gallia ad septentriones vergit, maturæ sunt hiemes, tamen in  
 Britanniam proficisci contendit, quod omnibus fere Gallicis bellis hos-  
 tibus nostris inde sumministrata auxilia intellegebat et, si tempus anni  
 ad bellum gerendum deficeret, tamen magno sibi usui fore arbitrabatur,  
 si modo insulam adisset et genus hominum perspexisset, loca, portus,  
 aditus cognovisset; quæ omnia fere Gallis erant incognita.  
*Paræ gerendum and usui.* Give the principal parts of *intellege-*  
*bat, deficeret, and adisset.* 5
3. Decline throughout (a) *eadem manus*; (b) *celeris quæque*  
*navis.* 6
4. Write down the perfect indicative (first person singular only)  
 and the future participle (nominative singular masculine only) of the  
 following verbs :—*subsisto, redco, tendo, pingo.* 4
5. What constructions are used with—*pendere, decet, iurat,*  
*libet, propter, super?* 6
6. Write down all the forms in which you can express in Latin—  
 He sent envoys to Rome to sue for peace. 4
7. Translate into Latin :— 30  
 (a) The more men's pleasures cost them, the more they seem  
 anxious to purchase them.  
 (b) The things which I treated lightly in my boyhood, I  
 value highly in my old age.  
 (c) Caesar returned to his pitched camp at Gergovia on the  
 7th July.  
 (d) The ships were prevented by the wind from returning  
 into harbour.  
 (e) He promises never to fail his friends.  
 (f) Catilina said that they did not need discussion, but  
 prompt action.
8. Translate into English :— 30  
 (a) *Miltiades.*  
 Iisdem temporibus Persarum rex Darius, ex Asia in Europam  
 exercitu traiecto, Scythis bellum inferre decrevit. Pontem fecit in Istro  
 flumine quo copias traderet. Eius pontis, dum ipse abesset, custodes  
 reliquit principes, quos secum ex Ionia et Aeolide duxerat, quibus singulis

suarum urbium perpetua dederat imperia. Sic enim facillime putavit se Graios, qui Asiam incolerent, sub sua retenturum potestate. In hoc fuit tum numero Miltiades. Hic, quum crebri afferrent nuntii male rem gerere Darium preniq̃ue a Scythis, hortatus est pontis custodes, ne a fortuna datam occasionem liberandae Graeciae dimitterent.

(b) *Love of one's Country.*

Nescio qua natale solum dulcedine cunctos  
ducit et inmemores non sinit esse sui.  
quid melius Roma? Scythico quid frigore peius?  
huc tamen ex ista barbarus urbe fugit,  
cum bene sit clausae cavea Pandione natae,  
nititur in silvas illa redire suas.  
adsuetos tauri saltus, adsueta leones.....  
nec feritas illos inpedit.....antra petunt.

FRENCH.

*Paper-Setter and Examiner*—REV. FR. E. POPULAIRE, S.J.

COMPULSORY PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate three of the following extracts :—

24

(a) La nuit était venue quand j'arrivai à la maison de König-strasse. Je m'attendais à trouver la demeure tranquille, mon oncle couché suivant son habitude et la bonne Marthe donnant à la salle à manger le dernier coup de plumeau du soir. Mais j'avais compté sans l'impatience du professeur. Je le trouvai criant, s'agitant au milieu d'une troupe de posteurs qui déchargeaient certaines marchandises dans l'allée; la vieille servante ne savait où donner de la tête.

(b) Je me sentis perdu. Une heure, deux heures, que sais-je ! se passèrent ainsi. Nous nous serrions les coudes, nous nous tenions les mains afin de n'être pas précipités du radeau; des chocs d'une extrême violence se produisaient, quand il heurtait la muraille. Cependant ces heurts étaient rares, d'où je conclus que la galerie s'élargissait considérablement. C'était, à n'en pas douter, le chemin de Saknussennun; mais, au lieu de le descendre seul, nous avions, par notre imprudence, entraîné toute une mer avec nous.

- (c) Dès le matin sous mon chaume

    Tout embaume,

Mes deux volets sont couverts :

Du chanvre et des genêts verts

    Quel arôme !

Lorsque la chaleur arrive,

    Quand la grive

Se cache au fond du blé noir,

Je puise à mon réservoir

    Une eau vive.

- (d) Lui qui raillait toujours, certes il ne raillait plus;  
Et dans son coin, le loup tout piteux et confus,  
Ses poils bruns hérissés et sa langue buvante,  
Epouvanté tâchait d'inspirer l'épouvante.

Tous deux se regardaient : ' Hélas ! pensait Ri-Wall,  
Avec ce compagnon il doit m'arriver mal !  
Et ce mal, juste ciel, vient sur moi par votre ordre !  
Oui, je serai mordu, moi toujours prêt à mordre.

2. Give your opinion of the peculiarities of Jules Verne as a writer of fiction. 8
3. Translate idiomatically :—à toutes jambes; nous étions tous deux d'accord; il remit sa visite; cela donne à réfléchir; à nous maintenant : lorsque je revins à moi; non pas que je sache; de son mieux. 8
4. (a) Give the plural feminine of—fou, pareil, jaloux, vieillot, trompeur. 5
- (b) Write the infinitive and the past participle of—craignis, résolvez, écrivons, croissons, meuvent. 5
5. Translate into French :— 30
- (a) We have seen some very pretty things.  
(b) The town was full of French soldiers.  
(c) Have you read the book which I gave you?  
(d) My mother and father went away last night.  
(e) Tell me what you are going to do.  
(f) This table is small, but that one is smaller.  
(g) This is for you, and that is for him.  
(h) Where were you yesterday?  
(i) I was at school in the morning.  
(j) Have these children any meat?
6. Translate into English :— 20

(a) Le soleil dit d'une voix éclatante : Je suis le roi du jour; je me lève dans l'Orient, et l'aurore me précède pour annoncer à la terre mon arrivée. Je frappe à la fenêtre avec un rayon d'or, pour t'avertir de ma présence, et je te dis : Paresseux, lève-toi; je ne brille pas pour que tu restes enseveli dans le sommeil : je brille pour que tu te lèves et que tu travailles. Je suis le grand Voyageur.

(b) Un riche fermier avait deux garçons, dont l'un était tout juste un an de plus que l'autre. Le jour de la naissance du second, il avait planté un pommier pour chacun d'eux. Lorsque les enfants furent en état de manier les outils du jardinage, il les mena, un beau jour de printemps, devant les deux arbres, qui avaient si également profité de leur culture, qu'on n'aurait jamais pu se décider entre eux pour la préférence. ' Je vous les donne, dit-il, ils pourront autant gagner par vos soins qu'ils perdraient, si vous les négligiez.'

### ADDITIONAL PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate three of the following extracts :— 18
- (a) Je ne veux qu'un arpent; pour le mesurer mieux,  
Je dirais à l'enfant, la plus belle à mes yeux :  
' Tiens-toi debout devant le soleil qui se lève;  
Aussi loin que ton ombre ira sur le gazon,  
Aussi loin je m'en vais tracer mon horizon :  
' Tout bonheur que la main n'atteint pas n'est qu'un rêve.'
- (b) Vives têtes d'enfants par la course effarées,  
Nous poursuivions dans l'air cent ailes bigarrées :  
Le soir nous étions las;  
Nous revenions, jouant avec tout ce qui joue,  
Frais, joyeux, et tous deux baisés à pleine joue  
Par notre mère, hélas !

(c) Il fallait se hâter. Nous étions à cinq jours de marche du carrefour. Je ne m'appesantirai pas sur les souffrances de notre retour. Mon oncle les supporta avec la colère d'un homme qui ne se sent pas le plus fort; Hans avec la résignation de sa nature pacifique; moi, je l'avoue, me plaignant et me désespérant; je ne pouvais avoir de cœur contre cette mauvaise fortune.

(d) Que se passa-t-il alors? Le bruit de la détonation, je crois que je ne l'entendis pas. Mais la forme des rochers se modifia subitement à mes regards; ils s'ouvrirent comme un rideau. J'aperçus un insondable abîme qui se creusait en plein rivage. La mer, prise de vertige, ne fut plus qu'une vague énorme, sur le dos de laquelle le radeau s'éleva perpendiculairement.

2. What is the moral lesson of 'What is bred in the bone will not be out of the flesh?' How does La Fontaine convey it to us? 8

3. What is the rule for the agreement of the past participle of reflexive verbs with the object? 6

Translate:—she has cut herself; she has cut her hand.

4. Translate:—he has gone away; do not go away; will he go away? I have gone away; let us go away; that you might have gone away; going away; having gone away. (N.B. Use the verb *s'en aller*.) 8

5. Insert relative pronouns in each of the following:— 10

(a) La maison—vous voyez.

(b) Entendez-vous ce chien aboie?

(c) L'homme—je vous ai parlé.

(d) Le train par—vous êtes venu.

(e) L'arbre à l'ombre—vous êtes assis.

6. Translate into French:— 30

(a) (i) He always works well, therefore he is never punished.

(ii) How old is that little girl? She will be eight years old next Tuesday.

(iii) To whom does this pen belong? I think it is mine.

(iv) These houses are to be sold, but I am not rich enough to buy them.

(v) You will think of us, when you are far away.

(b) A boy who had gone to the sea-side for his holidays, was one day talking to an old fisherman, who told him that his father and his grandfather had both been drowned. 'Then,' said the boy, 'why do you go on the sea?' 'Because I love the sea,' said the sailor. 'But are you not afraid of being drowned too?'—'I never think of that,' answered the old man. 'But, tell me, where did your father die?' 'In his bed,' replied the boy. 'And your grandfather?'—'Also in his bed.'—'Then, my young friend, I think you are very foolish to sleep in a bed; it seems to be a very dangerous place. You will surely die there one of these days.'

7. Translate:— 20

(a) O combien d'actions, combien d'exploits célèbres,  
Sont demeurés sans gloire au milieu des ténèbres,  
Où chacun, seul témoin des grands coups qu'il donnait,  
Ne pouvait discerner où le sort inclinait!  
J'allais de tous côtés encourager les nôtres,  
Faire avancer les uns et soutenir les autres,  
Ranger ceux qui venaient les pousser à leur tour,  
Et ne l'ai pu savoir jusques au point du jour.

(b) Ces questions n'étaient pas faites pour m'endormir, et comme je ne leur trouvais pas de réponse, je tâchais de les chasser de mon esprit, mais c'était en vain. Après un certain temps, je vis de nouveau la lumière emplir notre voiture, et de nouveau je regardai par la fente de mon rideau; mais cette fois ce fut malgré

## MATRICULATION EXAMINATION

moi et contre ma volonté, tandis que la première s'avait été tout naturellement pour voir et savoir. Maintenant je me disais que je ne devrais pas regarder, et cependant je regardai.

CLASSICAL ARMENIAN.

**Paper-Setters—** { MR. M. J. SETH, M.R.A.S.  
                              ,, S. MIHJEAN.

*Examiner.*—MR. M. J. SETH, M.R.A.S.

### COMPULSORY PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

25

[illegible]

- [illegible]

4a) Peter arose and went with them.

(b) when he came they brought him into the upper chamber.

(c) All the workers stood by him weeping.

and they showed him the coats and garments which he made for them

so Peter knelt down and prayed.

81 And he said Tabitha arise! and she opened her eyes.

(9) And when the next Pliers, she sat up.

6. correct the following

(10)  $\log_{10} 1000 = 3$

«) Էրեբոս պատկանում էր Երեմիային:

10) Երկրորդ. Կրիչ և Հայացիք Կառնուս Կո

ፈ) ስ.ሰ.ፖ ቀጠቀጠሃቸውን ለግራም 200-ፖ.

(c)  $\Pi_{\mathcal{H}}(u) = \frac{1}{2} (u + \bar{u})$  and  $\Pi_{\mathcal{H}^\perp}(u) = \frac{1}{2} (u - \bar{u})$ .



## CLASSICAL TIBETAN.

*Paper-Setter and Examiner—MR. SATKARI MUKHERJEE, M.A.*

## COMPULSORY PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate the following extracts into English :—

40

(a) སྤོན་ཡུལ་དབུས་སྤུང་མཐའ་གྱི་སྤོབ་དཔོན་གྱི་མཐའ་པ་ཞིག་བྱང་ངོ།  
 དེ་དགོས་པ་འགའ་ཞིག་གི་ཕྱིར་ཡུལ་ནས་ཅན་དུ་སོང་ལྟེ། དེ་ན་འགྲུལ་ཁོར་གྱི་སྤྱུ་ཅལ་ལ་  
 མཐའ་པའི་སྤོབ་དཔོན་ཞིག་གི་བྱིས་དུ་ཞུགས་པ་ལ། དེ་ཉལ་བའི་རིམ་འགོ་བར་འབྲུལ་  
 འཁོར་གྱི་བྱ་མོ་ཞིག་བྱས་ནས་བཏང་ངོ། དེས་དེའི་ཀང་པ་གཏྲིས་བཀྲུས་ནས་འདུག་གོ།  
 དེ་ནས་དེས་སོང་ཞིག་ཅེས་སྒྲུབ་ན། དེ་ཅང་མི་སྤྱོད་བར་འདུག་གོ། དེས་བསམས་པ།  
གདོན་མི་ཟ་བར་འདི་བདག་དང་དགའ་དགའ་སྤྱོད་པའི་ཕྱིར་བཏང་ངོ། ལྷ་ནས་དེས་དེའི་  
ལག་པ་ནས་བཟུང་ལྟེ་དྲངས་པ་ལས། ཇི་ཅས་ཞིག་ནས་གིང་བྱལ་གྱི་ཕུང་བོར་འགྱུར་དོ།

(b) ཚས་ནམས་སྤོན་དུ་ཡིད་འགོ་ཡིད་གཙོ་ཡིན།  
 ཡིད་མགོགས་རབ་དུ་དང་བའི་ཡིད་ཀྱིས་ནི།  
 ལྷ་ས་སམ་བྱས་ནས་སྤྱག་བསྐལ་དེ།  
འཕྲོབ་འགྱུར་འཁོར་ལོས་འབྲུག་པས་མགོ་བོ་བཅད།

2. Comment grammatically on the underlined word in (a); and conjugate the roots of the underlined expressions in the present, past, and future tenses, and in the imperative mood. 10

3. Give a brief account of the reforms and achievements of King Strogs-chen-gam-po in Tibet. 10

4. Explain in English the purport of the following stanza :— 10

བསགས་པ་ཀུན་གྱི་མཐའ་ཟད་ཅིང་།  
 མཐོན་པོ་ནམས་ཀྱི་མཐའ་ལྷུང་འགྱུར་།  
 ལྷ་པའི་མཐའ་ནི་འབྲལ་བ་ལྟེ།  
 གཞིན་པོའི་མཐའ་ནི་འཛི་བ་ཡིན།



5. Translate the following passage into Tibetan :—

30

When she was gone, Cassim's wife looked eagerly at the bottom of the vessel to see what it might contain and was greatly surprised to find a bit of gold sticking to it. Her heart was filled with envy at this sight; and she said to herself: 'What! has Ali Baba got so much gold then that he can't stop to count it but must even weigh it with a measure? Where can the wretch have got so much gold, then?' She waited in impatient anger for her husband's home-coming, and said to him as he returned: 'Cassim, you think that you are very rich, but undeceive yourself. Ali Baba has got much more wealth than you can boast; he measures his money, and does not count it as you count your miserable little heap!'

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### ADDITIONAL PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate the following passage into Classical Tibetan :—

40

An old king fell sick; and when he found his end drawing near, he said, 'Let Faithful John come to me.' Now Faithful John was the servant that he was fondest of and was so called because he was true to his master all his life long. Then when he came to the bed-side, the king said, 'My Faithful John, I feel that my end draws nigh, and I have now no cares save for my son, who is still young and stands in need of good counsel. I have no friend to leave him with but you; if you do not pledge yourself to teach him all he should know, and to be a father to him, I shall not shut my eyes in peace.' Then John said, 'I will never leave him, but will serve him faithfully, even though it should cost me my life.' And the king said, 'I shall now die in peace: after my death show him the whole palace: all the rooms and vaults, and all the treasures and stores which lie there: but take care how you should show him one room,—I mean the one where hangs the picture of the daughter of the king of the golden roof. If he sees it, he will fall deeply in love with her, and will then be plunged into great dangers on her account: guard him in this peril.' And when Faithful John once more pledged his word to the old king, he laid his head on his pillow, and died in peace.

2. Translate the following extract into English :—

40

ཐོན་ཁྱིམ་བདག་ཞིག་གིས་རྒྱང་མ་སྤངས་པ་ལས་ཁྱེད་ཞིག་བཙས་པ་ལ། དེས་  
རྒྱང་མ་ལ་སྤྲོས་པ། བདག་ཅག་ལ་བྱ་ཕྱིས་པས་ནོར་བསྐྱབ་དགོས། ཟོང་ཐོགས་དེ་ཀྱ་མཚོ་  
ཆེན་པོར་འགྲོའོ། རྒྱང་མས་སྤྲོས་པ། དེ་བཞིན་དུ་སེའི་ཅིག། དེ་ནས་ཀྱ་མཚོ་ཆེན་  
པོར་འགྲོ་བ་ལས་དེར་ཤིའོ། རྒྱང་མས་ཕྱང་ན་བསངས་པ་བྱས་ནས། བྱ་གསོམ་དེ་ཆེར་  
བསྐྱེད་ོ། དེའི་ཐག་ཉེ་བ་ཞིག་ན། ཐ་ག་པའི་བཟོ་ལ་སྐྲས་པ་ཞིག་གནས་དེ། དེས་རང་  
གི་བཟོས་འབྱོར་བ་འབྱུབ་པར་མང་ནས་སྤྲོས་པ། ཐ་ག་པའི་ལས་ནི་སེའི་ལོན་གྱི།  
ཀྱ་མཚོར་འཇུག་པ་ནི་དེ་ལྟ་མ་ཡིན་དེ། རྒྱལ་མ་ཡིན་པས་སྤྱག་བསྐྱུལ་བར་ལགྱུར་། དེའི་  
ཕྱིར་མིང་པོ་ཁྱེད་ཀྱིས་ཚ་བོ་འདི་ལ་ཐ་ག་པའི་ལས་སྤོབས་ཞིག། དེ་ལྟར་བྱའོ་ཞེས་བསྐྱབས་  
པས། དེ་རིག་པ་ནོ་བས་ཡུན་གྱང་དུ་ཞིག་གིས་ཐ་ག་པའི་ལས་རྣམས་ལེགས་པར་ཤེས་པོ།  
དེ་ནས་ཇི་ལྟར་བྱས་ཀྱང་ཐ་ག་པ་དེས་ཟས་བཟང་པོ་ཟ། གོས་བཟང་པོ་ཁྱོད། ཁྱེད་དེ་ལ་དེ་  
ལྟར་མ་འབྱོར་བས། སྤྲོས་པ། ཞང་པོ་ཁྱེད་ཀྱང་ལས་འདི་ཁོ་ན་བྱེད་ལ། བདག་ཀྱང་  
ལས་འདི་ཁོ་ན་བྱེད་པ་ལས། ཁྱེད་ལ་ཟས་གོས་བཟང་པོ་འབྱོར། བདག་ནི་དེ་ལྟར་མི་  
འབྱོར་༥ དེས་སྤྲོས་པ། ཚ་བོ་བདག་ནི་ལས་གཉིས་བྱེད་དེ། ཉིན་པར་ནི་ཐ་ག་པའི་  
ལས་དང་། ལྷུ་མོ་ནི་ལྷན་པོ་བྱེད་དོ༥

3. Give a short-summary and point out the moral of the 10 story, བྱ་བདན་གྱིས་པ་བསྐྱེད་པ།

4. Give five Tibetan classical proverbs with their English translations.

5. Correct the errors in the following :—

5

སྤྱལ་པོའི་མི་ཚོས་བཙང་མ་བཙུག་གི་ཁྱིམ་བཙས་པར་མཛད་པ།

## BENGALI TEXT (FOR MALE CANDIDATES.)

*Paper-Setter and Examiner*—RAI BAHADUR DR. D. C. SEN,  
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## COMPULSORY PAPER.

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

1. Explain the allusions contained in the following passages :— 9

(a) “বিশেষতঃ একবার এক বৈরাগীর আখডায় চূণকামকরা  
এক গিরিগোবর্দ্ধন দেখিয়া পাহাড়ের আকার অনুভব করিয়া লইয়াছিলাম।”

(b) “সীমার হোশেন-শির পূর্ববৎ বর্ষায় বিদ্ধ করিয়া দামেস্কা-  
ভিমুখে চলিল।”

(c) “আমি এই সময়টা সেকুপীয়রের গ্রন্থরাজি পাঠ করিব। কিন্তু  
পিতঃ তুমি এই সময়টা কি করিয়া কাটাইবে?”

2. Explain any four of the following with reference to their contexts :— 16

(a) যে বংশে সগর রাজা, রঘুবীর মহাতেজা,  
ভগীরথ বেণ মহাশয়  
হেন বংশে জনমিয়া, না কৈলু বংশের ক্রিয়া,  
জিনে যোরে মূনির তনয়।

(b) বিশ্বলোক ভাবিল বিন্ময়ে,  
যাহার পতাকা  
অম্বর আচ্ছন্ন করে, এত কাল ক্ষুদ্র হ’য়ে  
কোথা ছিল ঢাকা?

(c) গগনবিসর্পী বনস্পতি যখন ভূমিতে কলেবর রক্ষা করে, তখনই  
তাহার জীবনেতিহাসের পরিসমাপ্তি হয় না।

(d) যাহার মুখ কুশের অগ্রভাগ দ্বারা ক্ষত হইলে তুমি ইঙ্গুদী  
তৈল দিয়া ত্রণ শোষণ করিয়া দিতে,—সেই মাতৃহীন ইরিণ-শিশু তোমার  
গতিরোধ করিতেছে।

(e) সেই অকোমল ক্ষুদ্রশিশুহস্তটুকুর স্পর্শখানি তাহার বিরাট  
বিরহী বকের মধ্যে সুধাসঞ্চার করিয়া রাখে।

(f) যাহার প্রচণ্ড ঘূর্ণপাকে শত শত লোক মৃত্যুমুখে পতিত  
হইয়াছে, তাঁহারই ঘাটে ঘাটে এত লোকের ভিড় কেন?

3. Parse the words underlined in the above extracts and give short biographical notes on the authors of (a), (b), and (d). 8

4. Correct all errors in the following :—

12

আমি আগামী পরব তারিখ বাড়ী যাইয়া দেখিলাম, আমার মাতা আরোগ্য হন নাই, তাঁহার পীড়া উৎকট-অবস্থা। ডাক্তারেরা আমাকে কোনই বিশ্বাস দিতে পারিলেন না, তথাপি বলিলেন “এই বিপদ কর্তিত হইয়া না গেলে আপনার কোন ক্রমেই হইঁর সন্নিকট ত্যাগ করা উচিত হইবে না।” এ দিকে পূজা সমাপ্ত, এ সময়ে গৃহে থাকিলে নানা দিকেই ক্ষতির ভরসা। কি উপায় ধারণ করিব, মাতৃদেবীর চিকিৎসারই বা কি পস্থা ব্যবস্থা করিব, তাহা ভাবিয়া কিছুই অবধান করিতে পারিলাম না। হৃর্ভাবনায় চক্ষে তিলফুল দেখিতে লাগিলাম।

5. Re-write the following, correcting all spelling mistakes :—

8

তুমি কি সত্য সত্যই বাড়ী যাওয়া স্থীর করিয়াছ ? আমি তোমার দেখটা একবার বেরাইয়া আসিব মনে করিয়াছিলাম, কিন্তু এত তারাতারি তো আমি জোগার করিয়া প্রস্তুত হইতে পাড়িব না। ধোবার বারীতে কাপর গুলি আছে. সে গুলিই বা ফেলিয়া যাই কিরূপে ?

6. Join the following sentences to make one simple sentence :—

4

- (a) সন্ধ্যা সেদিন অতি মনোরম ছিল।
- (b) নদীর ঢেউগুলি নিশ্চল ছিল।
- (c) আমরা কয়েকটি বন্ধু গল্প করিতেছিলাম।
- (d) আমরা সেই নদীতীরে ভ্রমণ করিতে লাগিলাম।

7. Translate any two of the following into English :—

18

- (a) পাঠ করি লিপি বজ্রকণ্ঠে হাঁকিলা মালেশ্বর,—  
নামাও বংশী, ধামাও নৃত্য, সাজ খুলে' ফেল, বর।  
কঠিন বিবাহ ঘনায়েছে আজ,  
তারই লাগি সবে পর' নব সাজ,  
সেই মিলনের শুভলগ্নের সময় অগ্রসর—  
হে বরযাত্রী ! আগত রাত্রি—হও সবে সত্বর।
- (b) কুড়িয়ে পথের রোগী সংক্রামকে দিলা তুমি প্রাণ,—  
তবুও নাস্তিক তুমি ! ও অস্থি নেবে না গোরস্থান !  
তাই ছাত্র পল্লীতলে বিরাজিছ ছাত্রের দেবতা !  
সমাধা—সমাধি সেধা পবিত্র ব্রতের যেধা স্মরু !  
ছাত্র পরম্পরা স্মরে পুণ্য তব জীবনের কথা—  
মহুশ্বত-ধর্ম্মে পূত—হে নাস্তিক ! আশ্তিকের গুরু !
- (c) মারাঠির সাধে আজি, হে বাজালী, এক কণ্ঠে বল  
“জয়তু শিবাজী !”  
মারাঠির সাধে আজি, হে বাজালী, একসঙ্গে চল  
মহোৎসবে আজি।

আজি এক সভাতলে ভারতের পশ্চিম পূর্ব  
দক্ষিণে ও বামে,  
একত্রে করুক ভোগ একসাথে একটি গৌরব  
এক পুণ্য নামে ।

8. Translate the following into English :—

25

আমরা যতই অগ্রসর হইতে লাগিলাম ততই সমুদ্রের গর্জন স্পষ্ট  
ভাবে শুনিতে পাইলাম, তখনও নীল সিঁদু আমাদের চক্ষে পড়ে নাই ;  
মনে হইল ভূতল হইতে শত বজ্রনাদ উখিত হইতেছে । আমরা উৎসাহের  
সহিত কথা বলিতেছিলাম, কিন্তু সেই মহাশব্দ আমাদের কাছে যেন চূপ  
করাইয়া দিল, রাজাজ্ঞার মত সমুদ্রদেবের সেই আদেশ আমরা স্বতঃ স্বতঃ  
মান্ত করিয়া বিনা বাক্যব্যয়ে আরও কিছু দূর অগ্রসর হইয়া যে দৃশ্য দেখিতে  
পাইলাম, তাহা কখনও ভুলিব না । সেই আমাদের প্রথম সমুদ্রদর্শন ।  
শত শত তরঙ্গ ফেনিল তাজ মাথায় পরিয়া তালে তালে গর্জন করিতে  
করিতে আসিতেছে, তাহাদের মস্তকে সূর্য্যদেব সোনার মুকুট পরাইয়া  
দিতেছেন, শুভ্র ফেনপুঞ্জের উপর সূর্য্যরশ্মি ধক্ ধক্ করিয়া জলিতেছে ।  
সেই তরঙ্গরাশি ক্রমশঃ বেলাভূমির দিকে আসিয়া লাফাইয়া পড়িয়া ভাঙ্গিয়া  
যাইতেছে । আর এক দল তরঙ্গ পুনরায় পুঞ্জীভূত হইয়া তাহাদের স্থান  
লইতেছে ।

#### ADDITIONAL PAPER.

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

7

*Either,*

(a) জননী ঋষির দাসী, আমি তাঁহার একমাত্র পুত্র । একদা  
তিনি নিশাকালে গোদোহন করিবার জন্ত বাহিরে যান । পথে একটি  
কুম্বসর্প পাদস্পৃষ্ট হইবামাত্র তাঁহাকে দংশন করে এবং তিনি পঞ্চত প্রাপ্ত  
হন । কিন্তু এইটি আমি অভীষ্টসিদ্ধির বড় স্বযোগ মনে করিলাম ।

*Or,*

(b) আমি একাকী ঝিল্লিকাগণ-নির্নাদিত এক ভীষণ মহাবনে  
প্রবেশ করিলাম । পর্যটনশ্রমে আমার অতিশয় ক্ষুৎপিপাসা পাইয়াছিল ।  
আমি সরোবরে স্নান ও জল পান করিয়া ক্লান্তি দূর করিলাম । মন প্রশান্ত  
হইল ।

2. Give full references to the anecdotes in the life of the Saint  
referred to in extracts (a) and (b) in Question 1.

8

3. Explain any *three* of the following with reference to their context :— 10

(a) কৈলাসবাসিনীর সঙ্গে সঙ্গে আমার ঘরের আনন্দময়ী পিতৃভবন অঙ্ককার করিয়া পতিগৃহে যাত্রা করিবে।

(b) দণ্ডকারণ্যে যিনি আমার সঙ্গে সঙ্গে আসিয়াছিলেন, আমার সেই বনসজিনী দুঃখসহায়াকে কোথায় রাখিয়া আসিলে ?

(c) গোহাটী বস্তুটা যে ঠিক কি, তাহা আমি না জানিত না, কিন্তু মহেশ্বরের সঙ্কে ইহার উল্লেখ মাত্রই তাহার পিতা যে কিরূপ বিচলিত হইয়া উঠিত, ইহা সে বহুবার লক্ষ্য করিয়াছে।

(d) মরে না মরে না কভু সত্য যাহা, শত শতাব্দীর  
বিস্মৃতির তলে,  
নাহি মরে উপেক্ষায়, অপমানে না হয় অস্থির,  
আধাতে না টলে।

4. Expound the words underlined in the extracts in Question 3. 7

5. Translate into English :— 30

আকবর যুদ্ধবিজ্ঞান বিষয়ে পারদর্শী ছিলেন। সাহসে ও রণ-কৌশলে তিনি আরাজীবি হইতে কোন অংশে ন্যূন ছিলেন না। কিন্তু তিনি তাঁহার এই বীরত্ব যেখানে সেখানে দেখাইতে ব্যগ্র ছিলেন না। বস্তুতঃ তিনি যেখানে যুদ্ধ না করিয়া শান্তির সহিত তাঁহার সাম্রাজ্যের শ্রীবৃদ্ধি করিতে পারিতেন, সেখানে কখনই অস্ত্র-ব্যবহার করিতেন না। তিনি শ্রীতি ও বহুত্বের আশ্বাস-বাক্য লইয়া রাজপুতনার নৃপমণ্ডলীর নিকট অগ্রসর হইয়াছিলেন। ইহাতে সমস্ত ভারতবর্ষ অতি সহজে তাঁহার আত্মগত্য স্বীকার করিয়াছিল। তিনি হিন্দু মুসলমান ও খৃষ্টান এই তিন সম্প্রদায়ের উচ্চভাব লইয়া “এলাহি” নামক এক ধর্ম প্রচার করিয়াছিলেন। কথিত আছে তিনি স্বয়ং নিরামিষ ভোজন করিতেন এবং মাথায় তিলক পরিতেন। আকবর হিন্দুদের উপর যে জিজিয়া নামক কর ছিল, তাহা তুলিয়া দিয়াছিলেন এবং হিন্দুরাজ-কন্যা বিবাহ করিয়া হিন্দু-প্রীতির পরিচয় দিয়াছিলেন।

6. Correct all errors in the following :— 12

তুমি কি মনে করিয়াছ, প্রয়োজন বীনা আমি কখনও তাহার সঙ্গে দেখা শাক্ষাৎ করিতে বাই ? তুমি আমার চরিত্র ঠিক বুঝিতে সক্ষম হও নাই,—আমি যার তার সহিত বেশি ঘনিষ্ঠতা করিতে প্রস্তুত নই। সে একদিন যাচিঞা আমার সহিত ভাব করিতে আসিয়াছিল ; আমি বানিতাম তাহার অনেকটাই মৌখিক মৃতরাং আমি তাহার কথার আশ্বাস করিতে পারি নাই। যদিও সে দেখিতে ভাল, কথাবার্তা মিস্ট এবং অতি চতুর,

পরন্তু যে তাহার সহিত কতকদিন মিশিয়াছে সেই বৃত্তি পাবিল যে সে মনে মুখে এক নাই। তাহার বাহ্য একরূপ এবং ভিতরে অন্তরূপ।

7. Construct a few sentences to illustrate the use of a participle verb, and adverbial adjunct, a Bahubhīhi and a Karmadhāray samāsa.

6

8. Translate into Bengali :—

25

*Either,*

(a) Rām said to Lakshman. 'Don't you, dear brother, see in all that has transpired, the hand of Providence? It is the will of God that we should leave home and go to the forest. When anything happens, contrary to all reasonable expectations, changing the tide of affairs in an unforeseen direction, one may naturally trace such an unexpected course of events to divine dispensation. The queen Kaikeyī has loved me all along as her own son. Bharat was never dearer to her than my humble self. Every thing, preliminary to installation, was performed. Who in this great kingdom had the least shadow of doubt that I could be installed on the throne of Ayodhya to-day? But just see what turn the affairs have taken all on a sudden! It is the decree of Providence that has upset all arrangements and as such it will be foolish to fight against fate. The unforeseen—the inevitable has come, and matters as they stand now are beyond all human control.'

*Or,*

(b) Lakshman made an angry reply, he said. 'All misfortune comes in this way. Call it providential. There is no fighting with the name you give to it. But surely there is the power in man to resist and overcome all ill. It is cowardly to yield to adverse circumstances without a fight. Give me permission, dear brother, to fight with what you call Providence or Fate. I am prepared to establish, by manliness and courage, the superior moral force that I possess, and obtain victory over all untoward circumstances. Let me stand with my bow before all the force that Bharat may command. Alone though I be against hordes of enemies I will vanquish them in a short time, change the tide of affairs, and obtain the throne for you which rightfully belongs to you, but which you are going to abandon owing to effeminacy and cowardice.'

### BENGALI (FOR FEMALE CANDIDATES).

*Paper-Setters*—{ SRIMATI BANGABALA MOOKERJEE, B.A., B.T.  
,, SUNITI SARKAR, B.A.

*Examiners*—{ SRIMATI SANTA NAG, B.A.  
,, SANTIBALA RAY, M.A.

### COMPULSORY PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any two of the following passages into English :—

18

(a) তিনি ভাবিয়া দেখিলেন, হাতের কাজ করিয়া খাটিয়া খাওয়া যে হয় নহে এবং নিজের চেষ্টায় নিজের উন্নতি সাধন করা যে সকলেরই

লক্ষ্য হওয়া উচিত, ইহাই এখানকার নিশ্চেষ্ট উদাসীন লোকদিগকে ভাল করিয়া বুঝাইয়া দেওয়া চাই। নিজেদের দারিদ্র্য ও বিচ্ছিন্নতার মধ্যে প্রত্যেকে স্বতন্ত্র হইয়া জীবন না কাটাইয়া বাহাতে তাহারা একটা জনসমাজ গড়িয়া তোলে এবং নিজের উত্তমে রাস্তাঘাট তৈরি ও স্কুল স্থাপন করিয়া নিজের শক্তিতেই সকলে সমবেত ভাবে বড় হইবার জন্ত প্রস্তুত হইতে পারে সেই দিকে দৃষ্টি দিতে হইবে।

(b) সংসারে বাস্তব দুঃখের অভাব নাই, শত শত বৃশ্চিক পথের মধ্যে পড়িয়া আছে, তাহারা দংশন করিতেও ছাড়ে না; এই অবস্থায় কল্পনার সর্প প্রস্তুত করিয়া তাহার দংশনে জর্জরিত হওয়া কি ভাল? সন্দেহের সময়ে ক্ষুদ্র ক্ষুদ্র কারণ কল্পনা করিয়া লোক তাহা হইতে এমন একটা অকাটা সিদ্ধান্ত মনের মধ্যে দাঁড় করায় যে, কিছুতেই মনে হয় না যে, সন্দেহ ভুল। এইরূপ ধারণার ফলে লোককে ফাঁসি-কাঠে ঝুলাইয়া দিয়া বিচারক শেষে দেখিয়াছেন যে তাঁহার ধারণাগুলি ভুল ছিল, তখন অল্পতপ্ত চক্ষের অশ্রু মুছিয়াছেন। এমন অসার ভিত্তির উপর অশান্তির মঠ স্থাপন করিবেন না।

(c) এখনকার বিদ্যাশিক্ষা-প্রণালী অত্যন্ত দোষাবহ, শিক্ষা দিবার যে যথার্থ তাৎপর্য্য তাহা সিদ্ধ হয় না; বুদ্ধিবৃত্তিসকল পরিচালিত হইয়া বাহাতে উন্নত হয়, সে প্রকার নিয়মে শিক্ষা দেওয়া হয় না; কেবল কতগুলি সত্য উদয়স্থ করাইয়া দেওয়া হয় মাত্র। যুবকেরা যৎকালে বিদ্যালয়ে অধ্যয়ন করে, তখন বিদ্যার প্রতি তাহাদিগের অনুরাগ দেখা যায় বটে, কিন্তু যখন সংসারে প্রবিষ্ট হইয়া তাহারা অর্থসংগ্রহে প্রবৃত্ত হয়, তখন তাহাদের ভাব আর এক প্রকার হইয়া যায়। কেরানী-রাজ্যে একবার প্রবেশ করিলে তাহাদের সকল উৎসাহ নির্মাণ হইয়া যায়।

2. Explain any two of the following passages with reference to the context :—

14

(a) বরষার কালে, সখি, প্রাচীন পীড়নে  
কাতর প্রবাহ, ঢালে তীর অতিক্রমি,  
বারিরাশি দুইপাশে, তেমনি সে মনঃ  
দুঃখিত, দুঃখের কথা কহে সে অপরে।

(b) বীর অবয়ব বীরভাষা-প্রিয়,  
গউড়-সন্ততি সার,  
প্রিয়ংবদা সখা, প্রণয়ের তরু,  
কাহিনী কঠোর হার।

(c) শিলাখণ্ড, বাধা পরম্পর  
রোধ করে শ্রোভোবেগ, তরঙ্গ উত্তাল;  
কিন্তু অনাবদ্ধ হলে, উলটি, পালটি  
হয় ক্রমে রেণুশেষ।



(d) তুমি হে শ্রীবৎস ভূপ, ত্রেতাযুগে রামরূপ  
হইলেন প্রভু অবতার ।  
এক ব্রহ্মা চারি অংশে, জন্মিলা ইক্ষ্বাকুবংশে  
রাজা দশরথের কুমার ॥

3. Attempt any *one* of the following :—

11

(a) Compare and contrast the servants of the past with those of the present. How should a good housewife treat her servants?

(b) Write a short account of the work and teachings of Vivekananda, laying special stress on the following quotation given in your text :—

“ফিলসফি, যোগ, তপ, ঠাকুরবর, আলোচাল, কলাম্বা—এই সব ব্যক্তিগততত্ত্ব, দেশগততত্ত্ব, পরোপকারই এক সার্বজনীন মহাব্রত ।”

(c) How would you regard the actions of Jaykali as consistent in view of what Tagore writes about her in his story “অনধিকার প্রবেশ?”

4. (a) Name the different kinds of কারক, giving *one* example of each. 9

(b) Form sentences with the following words after turning them into the feminine gender :— 6

সরল, রজক, পাচক, ব্রাহ্মণ, মানব, গুণময় ।

(c) Name and define the different kinds of *samāsas* (সমাস) । 7

5. Correct all the errors in the following passage :—

10

দুরারোগ্য পর্কতে আরোহন করিতে আমি সক্ষম হইয়াছিলাম না ।  
দৌর্ভাগ্য বশতই যে একরূপত হইল তাহাতে আর আশ্চর্য্য কি ? আমার  
গাধী সখিয়া আমাকে পশ্চাদপদে ফেলিয়া চলিয়া গেল । কন্মিনদিকে  
কাহাকে না দেখিয়া আমি কানিতে লাগিলাম ।

6. Translate any *two* of the following extracts :—

25

(a) দেশের পক্ষে যাহা হিতকর তাহার অনুষ্ঠান এবং যাহা  
অকল্যাণকর তাহার সংস্কার না করিয়া কেবল সংস্কার সংস্কার বলিয়া  
চীৎকারে কোন ফল নাই । যাহারা প্রকৃত স্বদেশানুরাগী এবং  
স্বজাতিবৎসল, তাঁহারা স্বদেশের বাহ্যশোভা সৌন্দর্য্য বর্দ্ধন অথবা সুনীতি-  
সম্মত নিয়মাবলী এবং কঠোর শাসনের প্রতি তত লক্ষ্য রাখেন না ।  
তাঁহারা সমাজের নিয়মাদি গঠন প্রচলন ইত্যাদিতে মনোনিবেশ না করিয়া  
সামাজিকগণের হৃদয়ের উন্নতি ও চরিত্রের গঠন বিষয়ে অধিক আয়াস  
স্বীকার করেন । দেশবাসিগণ সত্যবাদী সাধুশিষ্ট না হইলে, সহস্র কঠোর  
নিয়ম পঠিত, প্রাচীন গৌরব প্রচারিত এবং বিদ্যাবুদ্ধি ধনরত্ন ইত্যাদি  
অর্জিত হইলেও দেশ-উন্নত হয় না ।

(b) বিপন্নকে উদ্ধার করিলে, দরিদ্রের পর্ণকুটিরে প্রবেশ করিয়া  
সহায়বিহীন সুস্বপ্ন পিপাসারিষ্ট বিপ্লব নুখে এক গণ্ডুষ জল দান করিলে,

কিৰা সমবেদনায় তাহাৰ অশ্রু সহিত আপনাৰ অশ্রু মিশাইতে পাৰিলে, হৃদয়ক্লেশিত নিরাশ্রয় মানবেৰ সংজ্ঞাহীন ক্ষীণ দেহ আপনাৰ হৃদয়ে ধারণ কৰিয়া তাহাৰ মুখে অন্ন ভুলিয়া দিলে, লোকে নিন্দা না কৰিয়া বৰং আনন্দে আগন্তুত হইয়া সেই দয়াৰ অবতारेৰ পূজা কৰিতে স্বতঃপ্রবৃত্ত হয়।' কিন্তু কি হুৰ্ভাগ্য! অভিমান এবং লোকলজ্জাৰ ভয় তাহা কৰিতে দেয় না। ইহাকে কুসংস্কাৰ ব্যতীত আৰু কি বলা যাইতে পাৰে ?

(c) সেদিন খুলনা হইতে একখানি ট্ৰেন দ্রুতবেগে এক ভয়স্থান অভিমুখে আসিতেছিল। একজন ধীৱৰ সেখানে মাছ ধৰিতেছিল। সে শত শত লোকেৰ আসন্ন মুহূৰ্ত দেখিয়া গাড়ী থামাইবাৰ জন্ত আপনাৰ পৰিহিত বস্ত্ৰখানা উদ্ধে উত্তোলিত কৰিয়া ইতস্তত সঞ্চালন কৰিতে লাগিল। কিন্তু ড্ৰাইভাৰ সে সঙ্কেত বুঝিতে পাৰিল না। গাড়ী দ্রুতবেগে আসিতে লাগিল। আৰু দু এক মিনিট পৰেই সমস্ত যাত্ৰী সহ গাড়ী নদীগর্ভে পতিত হইবে। ধীৱৰ নিজৰ প্ৰাণেৰ মায়া ভুলিয়া গেল। সে গাড়ীৰ সম্মুখে আসিয়া দণ্ডায়মান হইল এবং বস্ত্ৰ সঞ্চালন কৰিয়া সঙ্কেত কৰিতে লাগিল। ড্ৰাইভাৰ সম্মুখে একজন মনুষ্য দণ্ডায়মান দেখিয়া গাড়ী থামাইল। ধীৱৰেৰ ধৰ্মবুদ্ধিতে শত শত লোকেৰ প্ৰাণৰক্ষা হইল।

### ASSAMESE TEXT (FOR MALE CANDIDATES).

*Paper-Setter*—SRIJUT AMBIKANATH BORAH, M.A.

*Examiner*—SRIJUT BANIKANTA KAKATI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Give the story of *Rukminiharan* in Assamese as narrated by Sankardev. 14
2. Under what circumstances did Laksmikanta come to the house of Chandiboruah and how was he imprisoned? 10
3. *Either*, Give an account of the Battle of *Hdira*. 10  
Or, Give the substance of the conversation between *Halakanta* and *Jatiababa*.
4. Explain with reference to the context :—  
(a) *Either*, 12

তইতিষে আছগৈ আলহিহে তাত,  
হাটকৰা ৰূপে মাথো বোহাবলৈ হাট,  
ভবিবলৈ ইপুৰিত ষটিবলৈ ৰিত,  
ছদিনৰ নিমিত্তেহে আহ পুৰিৰিত।

Or,

জীৱনৰ সোঁৱে বাঁৱে আছে ছটি বাট,  
পৰিছাহি ভোমালোক তাৰে দোমোজাত,  
ওলমিছে ভাল বেয়া নব জীৱটিৰ,  
বাচনিৰ ওপৰতে সেই ছয়োটিৰ।

(b)

Either,

কুণ্ডিনৰ হস্তে মোৰ আসিছে চৰীয়া।  
আলোচল বীৰগণে বিৰলে বসিয়া॥  
যদিবা মাধৱ আসে আমাৰ সমাজ।  
সিংহাসন নিদিবোহঁ পাউক বৰ লাজ॥

Or,

উঠ উঠ বাপুতই তেজ ইটো মৰ্ম।  
লাজ অপমান ক্ষত্ৰিয়ৰ কোন ধৰ্ম॥  
হাৰিয়া জিনয় কহো জিনিয়া হাৰয়।  
সৰ্বকালে সংসাৰত কাৰো নাই জয়॥

5. Translate into English :—

12

যুজলৈ অহাৰ আগেয়ে হলকান্ত বৰুৱাই মনত দুটা ভাব লৈ আহিছিল। একভাৱ আছিল যে তেওঁ যদি বৰফুকনক লগ পায়গৈ তেন্তে তেওঁ বৰফুকনৰ ফলীয়া হৈ মানব লগত ৰণ দিব, আৰু সেই ৰণত যদি জিকিবহে পাৰে তেন্তে তেওঁ বৰফুকনৰ প্ৰিয় পাত্ৰ হৈ বৰ নগৰীয়া বৰুৱা যুজলৈ নহাৰ বাবে কথন লগাই বৰফুকন আৰু বজাৰ হতুৱাই বৰনগৰীয়া বৰুৱাৰ বিষয়খান গুচাই সেই বিষয় তেওঁ লব পাৰিব।

6. Explain any one of the following :—

14

(a) সাহিত্যৰ সোৱাদ আনবিলাক মিঠা বস্তুৰ দৰে নহয়! আন বস্তুৰ সোৱাদ জিভাৰে পাওঁ, আন বস্তুৰ ৰূপ চকুৰে দেখো। কিন্তু সাহিত্যৰ সোৱাদ মুখৰ জিভাৰে নেপায়, তাক মনেৰে চাকিব লাগে, তেহে তাৰ ৰূপ বা সোৱাদৰ গম পোৱা যায়। সেই দেখি জিভা নোহোৱা মানুহেও সাহিত্যৰ ৰকম বুজিব পাৰে। কণায়ো তাৰ ৰূপ দেখি ভোল যায়।

(b) একদিন বৎসক চৰাস্তে নাৰায়ণ।  
জ্যোষ্ঠ ৰাম সমে প্ৰবেশিল বৃন্দাবন॥  
সেই সময়ত যত ধেনু নিবন্তৰে।  
চৰায় গুৱালে গোবৰ্দ্ধনৰ শিখৰে॥  
বিদূৰৰ পৰা পাছে বৎসক দেখিল।  
মিলিল আনন্দ স্নেহে চেনন হৰিল॥

আনন্দতে আপোনাক পাসৰি লবড়ে ।  
বেগে বাষ্পদিয়া পৰ্ব্বতৰ পৰা পৰে ॥  
ওসাবৰ অৰে ছুধ লবড়ৰ পালে ।  
দেখি লাঠি তুলি আগ ভিটিল গুৱালে ॥

7. Frame short sentences with the following phrases :—

10

হাত-লব, পেট-টেঙৰ, ভাতে-ভড়ালে, মুখ-চোকা, চকু-চৰহা ।

8. Correct the following sentences :—

10

(a) তোমাৰ দেউতা কলৈ গল ? (b) ডাঙৰীয়াটি আহি  
বহিছে । (c) বাম চকিত বহি চাহ খাইছে । (d) তুমি খাব আহিলে  
ইয়াতে বহিবি । (e) পুৱাতে নোও এৰিব ।

### ASSAMESE TEXT (FOR FEMALE CANDIDATES).

*Paper-Setters*— { SRIJUT SURVYAKUMAR BHUIYAN, M.A.  
MR. BANIKANTA KAKATI, M.A.

*Examiner*.—MR. J. N. DOWERA, B.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any two of the following passages into English :—

25

(a) তেওঁ দুজন ভাৰ্যা বিয়া কৰাইছিল । প্ৰথম জনাই এটি  
পুতেকক সূৰ্য্যৰ পোহৰলৈ আনিয়েই এই জগতৰ পৰা বিদায় লোৱাত  
লৰাটি বুঢ়ী মাকৰদ্বাৰা প্ৰতিপালিত হৈ ডাঙৰ হয় । তেওঁৰ নাম যোগেশ্বৰ  
আছিল । তেওঁ বহুকাল সংসাৰৰ সুখ ভোগ কৰিবলৈ নেপালে ।

(b) ভাষা শিকিবৰ ঘাই উপায় হৈছে ব্যাকৰণ আৰু অভিধান ।  
কিন্তু যদিচ অসম দেশত অসমীয়া ভাষা বহুকালৰ পৰা চলি আহিছে তথাপি  
এই দেশৰ কোনো লোকৰ দ্বাৰা তাৰ ব্যাকৰণ আৰু অভিধান ৰচিত  
হোৱা নাই । এই কাৰণে ১৭৮১ শকত তেওঁ এখন ব্যাকৰণ ৰচনা কৰে ।

(c) লাজ পাই সখীয়েকে মাতিলে আকউ—“কিয় কৰা সীতা  
দেবি বিষাদ মনত অৱশ্যে বামৰ হাত শিলৰ নিচিনা, তুলা যেন পাৰা! কিন্তু  
তোমাৰ দেহত—বদন্ত পৃথিৱী ফাটি হয় ছিটাছিট, কোমল পহুমো কিন্তু  
বদেবে নিশ্চিত ।

2. *Either*, Give a short account of Hem Chandra Barua's life from the autobiographical note included in your text. 16

Or, Write out the story of Alexander and Diogenes and point out the moral.

3. Explain with reference to the context any *three* of the following passages :— 16

(a) একে চিনে আছে ছবি একো নাই হোৱা বহুদিন,—বহুদিন উৰিও নেযায়।

(b) পবিত্ৰ অম্বৰ বাৰ দাপোণৰ দৰে, স্বৰগৰ প্ৰতিবক্ষ ভাতে আহি পৰে।

(c) তেতিয়াৰ পৰা তেওঁৰ নাম “একাচেকা বৰুৱা” হ’ল।

(d) “হেমকোষ” অসমীয়া ভাষাৰ পক্ষে সঞ্জীৱনী মন্ত্ৰ।

4. Frame sentences illustrating the uses of the following idiomatic phrases :— 16

কানে কানে ; কপাল ফুল ; চকু চৰহা ; দাত লগা ; গা তোল।

5. Name and account for the case-endings in the words underlined :— 16

(a) সি লৰাকালৰ পৰা বৃথিয়ক।

(b) ইয়াত বাজে মোৰ আৰু একো নাই।

(c) হাহা-হুহু নামে এজন গন্ধৰ্ব আছিল।

6. Give the feminine forms of the following words :— 8

অজলা ; ডফলা ; ধোবা ; কপৌ ; কাকতী।

7. Translate any *two* of the following passages into English :— 24

(a) হাকিমে গছক সুধিলে, “গছ ! সঁচা কথা কৰি ; ধনখিনি কোনে নিলে ? খোৱন্তৰ পৰা মিছাবামে কলে, “সাধুবামে”। হাকিমে আকৌ সুধিলে, “কোনে ?” আকৌ উত্তৰ পালে “সাধুবামে”।

(b) এজন বজা আছিল। তেওঁৰ বৰ মৰমৰ ধোবা এটা আছিল। তাৰ নাম ৰাজকুমাৰ। ধোবাটোক তেওঁ কামত ইমান ভাল পাইছিল যে সি বেতিয়াই বিহকে লাগে বুলি খুজিছিল তাতে তেতিয়াই পাইছিল।

(c) পৰ্ব্বতৰ ওখ টিং দেখি হেৰা লৰা,  
উঠিবলৈ হেলা নকৰিবা ;  
হুখ নকৰিলে সুখ ক’ত পাবা তুমি ?  
ষড়কৰা বড়ক লভিবা।

## HINDI TEXT (FOR MALE CANDIDATES).

*Paper-Setter and Examiner—MR. NALINIMOHAN SANYAL, M.A.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate two of the following passages into English :— 16

(a) जो लोग सौ सौ मिन्नत-समाजत करके अपने मेली मिलापियों से छोड़े हाथी ऊँट मंगनी मांग लेते हैं, मोटियों को भाड़े के कपड़े पहनाकर तिलंगा बनाने हैं और फिर डंका बजाते निशान उड़ाते सारे नगर में गली गली अपने लड़कों की बरात घुमाते हैं उनको लजाना चाहिये।

(b) कालाकांकर भूलने की वस्तु नहीं है, वह छोटासा रम्य स्थान. सचमुच स्वर्ग का टुकड़ा था। उसमें रहने का समय भूखर्ग में रहने के समय की भाँति था। चिन्ता बहुत कम थी, वासनाएं भी इतनी न थीं, विचार भी सीमावद्ध स्थान में विचरण करता था।

(c) राम-नाम बिनु गिरा न सोहा।  
देखु विचारि त्यागु मद सोहा ॥  
बसन हौन नहिं सोह सुरारी।  
सब मूषण-मूषित बर नारौ ॥  
राम बिमुख सम्पति प्रभुतार्ई।  
गई रह्यो पाई बिनु पाई ॥  
सजल मूल जेहि सरिता नाह्यो।  
बरषि गये पुनि तबाह सुखाह्यो ॥

2. Either, Describe the interview of Hanumān with Sītā. 13

Or, Describe the causes which led to the failure of Dara. 13

3. Explain two of the following with reference to the context :— 16

(a) बोती बीरताये, बात उनकी बनाती कैसे,  
धूलसे औ लण-तूल से जो गये बीते हैं।  
उनको रंगों में भला बिजली भरेगा कौन,  
बात के कढ़े जो बार बार मुख सोते हैं।  
लोहा कैसे लेते हाथ कांपता है लोहा दूये,  
आँखें कैसे लह होती लह घंट पीते हैं ॥

(b) सब जग पालि जियाबत जोई।  
जायो तुमहिं देवि सहि सोई ॥  
भूप प्रजापति सरिस उदारा।  
मोरभ्रज रूप पिता तुम्हारा ॥

भई बहू तिनके घर 'माही' ।

जहँ हम अब दिनपति गुरु आही ॥

(c) गो इसके जोड़ का दूसरी हसीन औरत शाही रंगमहल में एक भी नहीं है, लेकिन यह बड़े ताजुब और अफ़सोस का मुक़ाम है कि नाक़दरे, हिममाथि के पूरे अंधे और उजड़्ड शाहज़ादे ने इसे आज पांच बरस से छोड़ रक्खा है ।

4. Are robbery and violence justifiable under any circumstance? 12  
Is there any extract in your text-book from any author which has dealt with the subject? What do you gather from a perusal of the extract? Discuss in Hindi.

5. (a) Distinguish between simple, complex and compound 6  
sentences, giving examples of each.

(b) Write sentences to illustrate the various idiomatic uses of 10  
उठना and बैठना ।

6. Re-write the following correctly :— 12

मुझे देखते ही उन्होंने ने चल दिये। रानी ने कही कि हम कुछ सुनना नहीं चाहती। रावण के मौत का ख़बर पाकर देवताएं खुश हुआ। जितने लाल पीले फलें हैं सबको तोड़ लाओ। जितने लड़कियां पढ़ती थी सब के सब ने पास कर गईं।

7. Translate the following passage into Hindi :— 15

To the north of Benares, between the Himalayas and the Ganges, stretches the country now known as Avadh, whose name long ago was Kosala. In the whole world perhaps can be few other lands so beautiful as was this, for it abounded in corn, in cattle, and in forests, and all its people were prosperous and in peace. Kosala had great rivers, fair places of pilgrimage, and noble cities. Though she was surrounded on every side by powerful kings, she was the jewel among the kingdoms.

### HINDI TEXT (FOR FEMALE CANDIDATES).

Paper-Setters— { MR. SIBNARAIN LALA, B.A.  
                                  ,, SAKALNARAYAN SHARMA.

Examiner—MR. AMBIKA BAJPAI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English one poetical and one prose passage 20  
from the following :—

(a) राजन राउर नाम जसु, सब अभिसत-दातार ।

फल-अनुगामी-महिप-मनि, मन-अभिलाषु तुम्हार ॥

सब बिधि गुरु प्रसन्न जिय जागी ।  
 बोलिउ राउ रहसि मनु बानी ।  
 नाथ रामु करियहि जुबराजू ।  
 कहिय कृपा करि करिय समाजू ।  
 मोहि अकृत यहु हीउ उकाहू ।  
 लहहि लोग सब लोचन-लाहू ।  
 प्रभु-प्रसाद सिव सबद निबाहीं ।  
 यह लालसा एक मन माहीं ।

- (b) राम-बिरह-सागर महुँ, भरत मगन मन होत ।  
 विप्र-रूप धरि पवन-सुत, आइ गयउ जनु पीत ॥  
 बैठे देखि कुसासन, जटा-मुकुट कस-गात ।  
 राम राम रघुपति जपत, सबत नयन जल-जात ॥  
 देखत हनुमान अति हरषेत ।  
 पुलक-गात लोचन-जल बरषेत ।  
 मन महुँ बहन भाँति सुख मानै ।  
 बोलिउ सबन-रूपा-सम बानी ।

(c) आधी रात के समय उन्होंने कंदक नामक सेवक से कंटक नामक अश्व मंगाकर और उस पर सवार होकर पूर्व दिशा का रास्ता लिया। मार्ग में घने जंगलों, सुनसान मैदानों और अनेक छोटे-मोटे नदी नालों को पार करके वे कोलिय राज्य में पहुँचे और वहाँ से अनामा नदी के किनारे गए। वहाँ उन्होंने अपने शरीर पर दो-एक साधारण वस्त्र रखकर शेष वस्त्राभूषण तथा अश्व कंदक को देकर उसे हठ-पूर्वक कपिलवस्तु को वापस भेज दिया।

(d) आप सर्वश्रेष्ठ ब्राह्मण जाति के हैं। अब तक जो कुछ मैंने प्रयत्न किया है वह हिंदू-धर्म और हिंदुओं की रक्षा के लिये किया है। साक्षात् भवानी देवी ने मुझे आज्ञा दी है कि गा-ब्राह्मण की रक्षा कर, हिंदू देवालयों के तोड़ने और हिंदू देवताओं की मूर्ति-खंडन करने का बदला ले तथा हिंदू-धर्म के विद्वेषियों का संहार कर। जगदंबा की इस आज्ञा से ही मैं इस कार्य में प्रवृत्त हुआ हूँ। आप जैसे सर्वश्रेष्ठ ब्राह्मणों की सहायता की इस कार्य में अत्यंत आवश्यकता है।

2. (a) Give the opposite genders of any five of the following words :— 5

बेटा, बेल, भैंस, पिता, कुत्ता, माली, मोर, देवी, बुढ़िया and बहिया। 1

(b) Join the following three sentences so as to make one simple sentence :— 2

(i) मैं घर गयी; (ii) वहाँ अच्छी तरह भोजन किया; (iii) उसके बाद तुरत यहाँ चली आयी।

3. (a) Decline भाई or डाकू in both numbers in the nominative, objective, and possessive cases. 5

(b) How are adjectives compared in Hindi? Give examples. 3



4. Make sentences using *five* of the following expressions :—

5

रातों रात, दिन दिन, दिये का अन्धा, साथ देना, आगबबूला हो उठना, जोम में आना, रोब गाँठना, पीछे लगा देना, बात कौ बात में, and कानों पर जूँ नहीं रे'गना ।

5. Describe in your own words in Hindi the social rites and customs of India in the time of Lord Shrikrishna.

10

6. *Either*, Give in your own words in Hindi a brief estimate of the character of Vibhishan.

10

*Or*, Describe in your own words in Hindi the scene in Ayodhya when Shri Ramchandra returned from exile.

7. Correct all errors in any *five* of the following sentences :—

10

- (a) कितना लड़कौ वहाँ खेल रही है ।
- (b) राक्षसी सब सीताको बहुत डर दिखाई ।
- (c) तुम कौन शहर में रहता है ।
- (d) प्रतापने अपना किताब लेकर चल दिया ।
- (e) जनक राजा को एक और बेटी थी जिसकी नाम उर्मिला थी ।
- (f) हरेक लड़काका एक एक रुपये दो ।
- (g) मेरे चाचाजी उसे एक किताब दिये हैं ।
- (h) मैंने बोला था कि मुझे मेरे घर जाने हांगा ।

8. Translate any *two* of the following passages into English :—

25

(a) कुछ मनुष्य यह कहते हैं कि स्त्रियों को कभी न पढ़ाना चाहिए, क्योंकि यह नई बात है ; पुराने समय में स्त्रियाँ नहीं पढ़ती थीं। क्या उस समय के लोग मूर्ख थे जो उनको नहीं पढ़ाते थे ? यह इन लोगों का धर्म है। स्त्रियों को विद्याहीन देखकर प्रसन्न होनेवाले मनुष्यों से पूछना चाहिए कि यह उन्होंने कैसे जाना कि पहले स्त्रियाँ नहीं पढ़ती थीं। क्या वह नहीं जानते कि अगस्थ, वशिष्ठ आदि महर्षियों की स्त्रियाँ लोपासुद्रा, अनसूया, अरुंधती आदि बड़ी पंडिता थीं ?

(b) राजकुमार एलबर्ट श्रीमती महारानी के राज-काज संभालने में सदा सहायक रहते थे। प्रातःकाल चाय पीकर उपवन की सैर को जाते और वहाँ से आकर अपना गिल्य नेम करके चित्रकारों में लगे रहते थे। दीपहर के पीछे महारानी का प्रधान मन्त्री आता, उसके साथ वह प्रतिदिन राज का काम करती थीं और सायंकाल गाड़ी में बैठकर अपने पति, माता अथवा और स्त्रियों के साथ बाहर सैर को जाया करती थीं।

(c) हिन्दुस्तान में पहले कोई नहर न थी। पाँच सौ बरस हुए मुसलमानों के समय में फ़ीरोज़शाह ने एक नहर भिवालिक पहाड़ के पास यमुना के पश्चिम तट से निकाली थी। उसकी तीन सौ बरस पीछे शाहजहाँ बादशाह ने उसी नहर को बढ़ाया और देहली में चाँदनीचौक के बीच से लाकर यमुना में मिलाया। उन्होंने दिनों एक दूसरी नहर यमुना के पूरब तट से निकाली गई जो उसके बनानेवाले अलीवर्दी ख़ाँ के नाम से प्रसिद्ध है।

## ORIYA TEXT (FOR FEMALE CANDIDATES).

Paper-Setters— { Mr. PRIYARANJAN SEN, M.A.  
 ,, ARTABALLABHA MAHANTI, M.A.

Examiner—Mr. PRIYARANJAN SEN, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any two of the following passages into English :—

(a) ରାଜଦାୟ୍ୟ ପରିଚାଳନରେ ରାଣୀ ଅତ୍ୟନ୍ତାଦର ପ୍ରଣୟନୀୟ 15  
 ପାଟକ ଥିଲା । ସେ ପ୍ରତିଦିନ ନିର୍ଦ୍ଦେଶ ସମୟରେ ଧର୍ମାଧିକରଣକୁ ଆସି  
 ବିଚାରାସନ ଶ୍ରଦ୍ଧାପୂର୍ବକ ନ୍ୟାୟ ବିଚାର କରୁ ଥିଲେ । ଅର୍ଥା ପ୍ରତ୍ୟକ୍ଷୀଙ୍କର  
 ବ୍ୟବହାର ଆମ୍ଭ ନିଜେ ପ୍ରବଣ କରି ଚିହ୍ନିତ ଯଥୋଚିତ ପ୍ରତିବିଧାନରେ  
 ଚପ୍ପର ହେଉ ଥିଲେ । ଧନୀ ବା ବଳବାନ୍ ପ୍ରତି ପ୍ରତ୍ୟାପ୍ରଦର୍ଶନ ଏବଂ  
 ଜିର୍ଜନ ବା ଦୁର୍ବଳ ପ୍ରତି ଅନାୟା ପ୍ରଦର୍ଶନ ଚାହାଙ୍କର ଅନୁମୋଦନ ନୁହେଁ ।  
 ଅଭିରିକ୍ର କରାରାରୁ ପ୍ରଜାମାନଙ୍କୁ ଅବ୍ୟାହତି ପ୍ରଦାନ ଏବଂ ରୂମ୍ୟଧିକାରୀ-  
 ମାନଙ୍କର ସମ୍ପର୍କରକ୍ଷା, ଏ ଉତ୍ତମପ୍ରତି ଚାହାଙ୍କର ଚାଷ୍ଟ ଦୃଷ୍ଟି ଥିଲା ।

(b) ମିବାରେଣ୍ଡର ଏହିପରି ଦୀନ ରିଖାରୀ ବେଶରେ ଅରଣ୍ୟକୁ 15  
 ଅରଣ୍ୟ ଦୁଇ ଦିନଯାଏନ କରିବାକୁ ଲାଗିଲେ । ତଥାପି ଚାହାଙ୍କର  
 ଅନ୍ତରାତ୍ମା ତିଳେ ମାତ୍ର ଖଲିଲା ନାହିଁ—ସେ ନିଜର କଷ୍ଟକୁ ଅତିହରି  
 ମଣୁ ଥିଲେ, ଚାହାଙ୍କ ଅନ୍ତରରେ କେବଳ ଏହି ଦୁଃଖାନଳ ପ୍ରକୃତି  
 ହେଉ ଥିଲା, ଯେଉଁ ଚିରାଗ୍ରୀବ ଅନୁଚରଣ ଚାହାଙ୍କ ଲାଗି ପ୍ରାଣ ବିସର୍ଜନ

କରିବାକୁ ପ୍ରସ୍ତୁତ ସେମାନଙ୍କୁ ସାମାନ୍ୟ ଫଳ ମୂଳ ରକ୍ଷଣ କରି ଘୋର କ୍ଳେଶରୋଗ କରିବାକୁ ହେଉ ଅଛି ଏବଂ ସ୍ବଚ୍ଛନ୍ଦମୁକ୍ତ ଅସ୍ପଷ୍ଟ ଅନଗନରେ କାଳଯାପନ କରୁ ଅଛନ୍ତି ।

(c) ରାଣୀଙ୍କର ପ୍ରାଣ ବିନାଶ କରିବା ନିମିତ୍ତ ଅଧରଷିଂହର ହସ୍ତ 15 ଚଳିଲା ନାହିଁ । ସେ ଆକୁଳ ହୋଇ କ୍ରନ୍ଦନ କରିବାକୁ ଲାଗିଲା ଏବଂ ରଣରମ୍ଭରୁ ପଳାଇବାପାଇଁ ବାରମ୍ବାର ପ୍ରାର୍ଥନା କଲା । ଦୁର୍ଗାବତୀ ଘୃଣିତ ଶତ୍ରୁସମକ୍ଷରେ ପୃଷ୍ଠରଙ୍ଗ ଦେବାକୁ ସମ୍ମତ ହେଲେ ନାହିଁ । ସେ କହିଲେ “ମୁଁ କି ଭାର ଏହି ଜୀବନ ଲାଗି ପବିତ୍ର କ୍ଷତ୍ରିୟଧର୍ମକୁ କଳଙ୍କିତ କରିବି ?” ଏହା କହି ଦୁର୍ଗାବତୀ ସ୍ବାୟଂହସ୍ତରେ ନିଜହୃଦୟରେ ଶୀଘ୍ରକୁରିକାଘାତ କରି ମାନବଲୀଳା ସମ୍ବରଣ କଲେ । ତାହାଙ୍କର ମୃତ୍ୟୁସମୟରେ ସେହି ରକ୍ତପ୍ଲାବିତ ସମରକ୍ଷେତ୍ରରେ ତାହାଙ୍କର ଛଅଜଣମାତ୍ର ସୈନିକ ଦଣ୍ଡାୟମାନ ଥିଲେ ।

2. Write a note on what you learn from ‘ସୂର୍ଯ୍ୟ’ . 12

3. Give a short account of the life of Pratap Sinha as 15 is given in the *Prabandha Patha*.

4. Give general rules for forming feminines from 10 masculines in Oriya, and quote examples.

5. Explain the following in simple Oriya :— 8

(a) ଉକ୍ରମଶୃଙ୍ଖଳା ଏକାନ୍ତକାଳିନ ଲଘୁହସ୍ତତା ଶିକ୍ଷା କରି ପ୍ରତିପକ୍ଷ-ପାତରେ ଲୋକନେତ୍ରରେ ବିସ୍ମୟ ଜନ୍ମାଇ ଦିଏ । ଅର୍ୟାସଦ୍ବାରା ଯୋଗୀ-ନବଦ୍ବାର-ନିରୋଧପୂର୍ବକ ପ୍ରାଣବାୟୁରୁ ସ୍ବବଶରେ ରଖି ନାନା ଲୋକୋତ୍ତର କର୍ମମାନ ସମ୍ପାଦନ କରନ୍ତି ।

(b) ହେ ଅନନ୍ତ ମହାପ୍ରଭୋ ! କେ ପାରିବ ବର୍ଣ୍ଣି  
 ତୋର ମହିମାର କଥା ; ଅପାର ଅଗମ୍ୟ  
 ଚକ୍ରର ଅତୀତ, ବିରୋ ! କି ବୁଝିବ ମୁହିଁ,  
 ଜ୍ଞାନ ବୁଦ୍ଧି ପରାଜିତ ତୋ ଚକ୍ରଚିନ୍ତାରେ ॥

6. Write sentences to illustrate the use of the following words :—

ମୁଣ୍ଡୁ, ଆଶୟ, ଅଜ୍ଞାନୀ, ଦୋଳକ, ଆନୁପୂର୍ବିକ, ସୌଷ୍ଟବ,  
 ଅବଗତି, ଚତୁଷ୍ଟଳ ।

7. Rewrite the following in elegant and correct Oriya :—

ବୃତ୍ତା ସଦପ୍ରସ୍ତୁ ଥା ଧପଟ କରି ହାଲିଆ ହୋଇ ନଥ କରି  
 ରାମମାହାନ୍ତୀ ପୀଣ୍ଡାରେ ବସି ପଡ଼ିଲା । ଦାମେଇ ଲେଙ୍କା ବୁହାର  
 ହୋଇ ବୋଇଲା, ଗୋସେଇଁ ତମ ପୋ ମାଧ ଗୋସେଇଁ କଣ  
 ଅମାନିଆ ହୋଇ ଘରୁ କୁ କରାଇ । ବୃତ୍ତା ପାକଲ ଆସୁ, ଖସି ପଡ଼ିବ—  
 ଟଳିଏ ଚକେଇଲେ ନାହିଁ । ହୁଁ ଗୋସେଇଁ କଳିକାଲିଆ କୁଆକୁ ପାରି  
 ହବ ନାହିଁ ।

8. Expound the following *samāsas* :—

10

ଭ୍ରାତୃସଂହାରାର୍ଥୀ, କପାଳମାଳାବଳୟିତ, ରିକ୍ଷାପାତ୍ରହସ୍ତ,  
 ହେମୋକ୍ତକରଶିଳାଳ, ଦ୍ଵାଦଶବର୍ଣ୍ଣୀୟ, ପ୍ରଣୟିକନୋଚିତ, ଘନୀରୂତ,  
 ଚିରପରିଚିତ ।

BURMESE TEXT (FOR MALE CANDIDATES).

Paper-Setter and Examiner—MAUNG WE LIN.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

I အောက်ပါလင်္ကာနှင့်အနက် တခုကို ရွေးကောက်၍ အင်္ဂလိပ်လို အဓိပ္ပါယ်ပြန်ပေ။ 10

သို့မဟုတ်။

အဓိပ္ပါယ်သွားမပျက်စေဘဲ သင့်ကောင်းမြင့်မြန်မာလိုရေးလိုလျှင် လည်း ရေးပါ။

(သ) ဝသန်ကာလ။ မိုးကျတည့်လျှင်။ ပျော်ပျော်ပါးပါး။ မယားနှင့် ဆွေငယ်လင်။ လက်ဘွဲ့ဝယ် ခြံဝင်။ ကိုယ်တွင်အဝတ်။ ပုဆိုး အင်္ကျီ။ စုတ်ပဲ့ပြီ။ ချည်နီဗောင်း ထွတ်ထွတ် ကယ်နှင့်လေး။ ။မိုးရေစွတ်လို့။ အဝတ်ကယ် မပါ။ သားသမီးကို ကိုယ်ထီး ပွေ့လို့သာ။ ဆေးတံတထွာ ကိုက်ကာ ထွန်ရင်း။ လယ်ခွက်ကယ် အခွင်။ ထွန်ရေးငင်။ ရေဝင် ပုစွန် တွင်းငယ်နှင့်လေး။ ။ဖူးပေါင် စင်းငယ်။ ခြင်း ပလိုင်ဝယ်။ ခရုပီလောရော နှော့၍သာ လွယ်။ ဟင်းရွက်ကယ် နုနယ်။ တသွယ် ကန်စွန်း။ ဆူးပုပ်ကယ်ကင်းပုံ။ အလုံးစုံ။ ဖူးငုံသာရော၍ မြှမ်းသည့်နှင့်လေး။

(ခ) မွေးလှကြိုင်လန်း။ မေတ္တာပန်းကို။ ဦးစွန်းထိပ်စွန်း။ ဆင်ခွဲပန်မှ။ ပွဲရန်သဘင်။ ဒေါသစင်လည်း။ အောင်မြင်စေလော့။ သပြေ ဆွတ်ခွန်။ ရွှေမင်းဝံ တောင်။ ကျွန်းညွန့် သောင်ထက်။ ဆောင်ဆောင် ရွှေနန်း။ မြင်းမိုရ်ထွန်းသို့။ သွန်းသွန်းရောင်ဟုံ။ မျက်ကိုးစုံနှင့်။ မိုင်းအံ့နတ်ကူ။ တည်တော်မူသည်။ ဆင်မြွန်က။ ဆဋ္ဌန္တလည်း။ နတ်သစက်အောက်။ လစဉ်ရောက်၍။ နတ်လောက်ကညာ။ တိုင်းအတည်တည်။ ပြည်အမျိုး။ ထီးတိုင်းတို့က။ ဆက်ဖို့နိယံ။ သစ္စာနံ၍။ ကျွန်ခံလှသည်။ ။ ရတနာပူရ။ သားတော်မြေးမြစ်။ ညွန့်သစ်စည်ပင်။ ရာဇဝင်အခေါင်း။ တပေါင် ကြွေးဟစ်။ ထွန်းရာဖြစ်သည်။ အောင်သေဌတု။ ။ ရွှေဝပြည်ကြီး။ ပြည်ပြည်တိုင်းနောင်။ အုပ်စိုးဆောင်ရသည်။ ပွင့်ရောင်ညီးကို။ မြင့်ချီးမြှောက်စာ။ ဤစာ

သက္ကရာဇ်။ ဘုန်းတော်သစ်၍။ နှစ်နှစ်ဆယ်ကျော်။ ရာက  
ပေါ်လျက်။ သက်တော်ရှည်မှု။ ပန်ထွာပြီသည်။ အောင်ဆု  
ဆင်လျက်။ မင်္ဂလာကြီး။ ဟောစာကြိယာ။ ဩဘာကျူး  
ဟိက်။ နိမိတ်အဖြစ်။ နိုင်ငံစည်သည် ဟု။ နတ်ပြည်ကြွ  
ညောင်း။ ဘေးတော်လောင်းကို။ ဗေါင်းစလွယ်အောင်။ စွဲရွေ  
ယပ်နှင့်။ ခပ်ကြည်ရှင်။ မင်းရင်ပြင်မှာ။ လျှောက်တင်ခြီးရ  
သည်။ ။

II စနည်းနှင့်တဘောင်ဆိုသည်မှာ အဘယ်အရာများကိုဆိုသနည်း။ ။ ၃  
အယူအဘက်မင်္ဂလာ အမတ်သည်။ မည်သည့်ဘုရင် လက်ထက်၌  
ပေါ်ထွန်းသနည်း။ ။ ၎င်းအမတ်ဆင်ခြင်ကောက်ယူတင်လျှောက်  
ယော စနည်းတဘောင်များ အနက်ဘုရားကို ရွေးချယ်၍မည်သည့်  
အခါ မည်သည့်အဖြစ်အပျက်နှင့်စပ်လျဉ်း၍မည်သို့ဆင်ခြင်ကောက်  
ယူကြောင်း ဘော်ပြပါ။

III. (က) ပိဇယပြဇာတ်ကို မည်သူ ရေးသားသနည်း။ မည်သည့်အခါ 2  
ပေါ်ထွန်းသနည်း။

(ခ) မြတ်စွာဘုရား ပရိနိဗ္ဗာန် မစံ ယူမှီ လင်္ကာဒီပ ကျွန်းနှင့် စပ် 3  
လျဉ်း၍ မည်သို့မျှာဒိတ်တော် ထားခဲ့သနည်း။

(ဂ) ထီးတင်တံပုံ။ ကိစ္စကုန်လျှင်။ မစုံမမက်။ ငြိမ်းကိုဖျက်။ ။ 4  
စကားကို ပိဇယပြဇာတ်တွင် မည်သူက မည်သူအား ပြော  
သနည်း။ အဓိပ္ပာယ် မည်သို့ဆိုလို သနည်း။

(ဃ) မဏိမေဓလာ နတ်သိဒ္ဓိ၏ အလုပ်ဝတ်ဘုရားများကို ဘော် 3  
ပြပါ။

IV. (က) ဘူရိဒတ်ဇာတ်တော်ကြီးကို မည်သည့် အကြောင်းနှင့် စပ် 2  
လျဉ်း၍ ဟောတော်မူသနည်း။

(ခ) ဘုရားလောင်း ဘူရိဒတ်သည် ပုဏ္ဏားသားအဘကို မည် 8  
သည့်အကြံ အရှယ်ဖြင့် နဂါးပြည်သို့ပို့ဆောင်၍ ကြီးစွာ  
သောစည်းစိမ်၌ ထားသနည်း။ ၎င်းအကြံ မည်ရွှေမည်မျှ အ  
ထမြောက်ကြောင်း မည်ရွှေမည်မျှ အထမြောက်ကြောင်း  
အကျဉ်းအားဖြင့် ဘော်ပြပါ။ ။ ၎င်းပုဏ္ဏား သားအဘကို  
၏ သဘောထား အကျင့် စာရိတ္တများကို နှိုင်းယှဉ်၍ပြပါ။

V. အောက်ပါ စကား အသီးသီးကို ရှင်းလင်း ပြည့်စုံစွာ အ 10  
ဓိပ္ပာယ်ဘော်ပြပါ။

လောကန္တရက်ငဲ့။ ။သရဉ္စသ်။ ။ဒီးနတ်။ ။ခွေးမြီးကောက်  
ကျဉ်းဘောက်၌။ ။ဂကိလေးပါးမလိုက်စား။ ။  
ဥပသကာ။ ။သဒ္ဓါမုနိဇီဝ ဂ္ဂိုရောက်။ ။

- VI. (က) ကရုဏ ကာရက ဝိဘက် အချိုးချိုးကို ဘော်ပြု၍ အသီး 6  
အသီး မည်သို့ အဒိပ္ပါယ် ထူးခြားကြောင်း စုံလင်စွာဘော်  
ပြပါ။
- (ခ) မည်သည့် ပြုချားကို နာမ်အစား အသုံးပြုနိုင်သနည်း၊ ဥဒါ 6  
ဟရုဏ်တခုစီပေးပါ။
- (ဂ) အောက်ပါ နာမဒေသန အသီးအသီးကို ခါးကျဘုရား 6  
သုံး၍ပြပါ။  
ခပ်သိမ်း။ ။စိုးစည်း။ ။တကာ။ ။တိုင်း။ ။  
အတိ။ ။အကြင်။ ။
- (ဃ) အောက်ပါ ကြိယာဒိသေသနအသီးအသီးကို ဝါကျဘုရား 4  
သုံး၍ပြပါ။  
ယင်းသို့။ ။ရုံ။ ။ချည်း။ ။အလျင်း။
- (င) ပါဒ္မစကားနှင့် မြန်မာစကားကို ပေါင်းဆက်၍ ရသောကြိယာ 3  
တို့၏ ဥဒါဟရုဏ်ခြောက်မျိုးဘော်ပြပါ။

VII. အောက်ပါ စာပိုဒ်ကို အင်္ဂလိပ်လို ပြန်ပါ။ 25

ငါ့ယောက်ဖတော်ဘုရားသည် ရွှေနန်းတော်မှ ချွတ်တော်မူ၍၊ နတ်  
ဘုံဒိဗာန၌ စမ္ပယ်တော်မူသည်။ ငါ့ယောက်ဖတော်အရှိုက်အရာကို  
သိမ်းမြန်းတော်မူ၍၊ အသီးအသီးခန့်အပ်တော်မူသည်မှာ။ ဝန်ကြီးဝန်  
ထောက် စာရေးကြီး။ ပြည်ရေးရွာမှစ၍၊ ဆင်းရဲသားကျွန်တော်မျိုး  
တို့တွင်။ တရားစကား အလှအယက် မငြိမ်မဝင် ခိုက်ပွား ရန်စည်ရှိ  
သည်များကိုလည်း။ ကြပ်ကြပ်တည်းတည်းခန့်ထားစီရင်ရမည်။ ပြည်  
ကြီးဝန်ကို ခန့်အပ်တော်မူသည်လည်း။ ရာဇဓမ္မလောကပစ္စုပ္ပန်။ သံ  
သရာစီးပွား။ ငါ၏သားတော်အစဉ်။ မြေးတော်အဆက်။ မြစ်တော်  
အညွန့် အခွန်စည်ပင်ပြန့်ပွားမည်ကို။ သိကျွမ်းနားလည်သူဖြစ်၍ တ  
ကြောင်း။ ဂဘိ ၄ ပါးမလိုက်။ သိကျွမ်းနားလည်သည်နှင့်။ အမှုကို  
ကြပ်ကြပ်တည်းတည်း စီရင်ရမည် အပ်ထား၍။ ဝန်ကြီးဝန်ထောက်  
စာရေးကြီးတို့အရာနှင့်။ ငါ့ယောက်ဖတော် မင်းတရားကြီးတို့လက်  
ထက် ပြုစုတော်မူသည်။ ကြပ်ကြပ်တည်းတည်းအခွင့်ချောက်သည်ကို  
စီရင်။ မသင့်သည်အမှုကို။ ငါ့ဗျာဒိတ်တော် ထွက်ရှိသော်လည်း။  
ဝန်တို့က စိစစ်၍ ရှိခိုးသံတော်ဦးတင်။

BURMESE TEXT (FOR MALE CANDIDATES).

ADDITIONAL PAPER.

*Paper-Setter and Examiner—MAUNG WE LIN.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

ငမာန် ဟိ လင်္ကာ နှစ်ခု အနက် တခုခုကို ရွေး  
ငမာန် ဟိ အင်္ဂလိပ်လို အဓိပ္ပာယ် ဖြစ်ပါ။ 10

သို့မဟုတ်။

အဓိပ္ပာယ်များ မပျက်စေဘဲ သင့်စကား ဖြစ်

ဖြစ်အလိုရေးလို ဟူ၍ လည်း ရေးပါ။

(က) လင်္ကာလှိုင်း ရွှေ ဖြစ်။ ဝေဟိုင်း ဝိုင်း၊ ကျေး  
ပို့ နှစ်ပါး၊ ဖြောက်ကျက်နာမှာ။ ဝေဆာဖြစ်  
လှောင်း။ ရွှေ ကျောင်း ဟိ၊ အ။ ထိုသင်္ဃာများ  
ငမာန် သင်္ဃာ။ တစ်ခုစီ။ နှစ်ခုစီ။ သင်္ဃာ  
ပါးစုံ ဆုံး နှစ်။ ဆယ် နှစ် ခွယ်။ နှစ်ခုစီ  
မဝင်။ ဝင်း ဝင်း ဝင်း။ ပျံ သင်္ဃာ ပုံစံ  
နှစ်ခုစီ နှစ်။ ဆုံး နှစ်။ နှစ်ခုစီ။ သင်္ဃာ  
ပျံ နှစ်ခုစီ။ နှစ် နှစ် နှစ် နှစ် နှစ် နှစ် နှစ် နှစ်





[illegible]

II

12

- အောက်တွင် ဂျပန် သို့ ချက်များကို ကော်ပြပါ။
- (က) ကသို ဂျွန် " ဟာရုကဝယ် " သို့ နဝမင်း ကျောက်  
သမ္မာ ဂုဏ်ရတင်း " ပွင့် ခုတောင်း သန့် " အလင်း  
တော် နည်း " မလျှော်ကျင့် နည်း " ခွင့် စိမ်းဒါသန်  
ပြင် ချီမျက်စိ " ဂျိ ကန်မင်း အား " အခင်း အ  
ဖွယ် " သမ္မာ အဖွင့် လေ့ကျင့် ချီ ဂျိ ဝေ  
(ခ) ခုတောင်း သို့ " ကောင်း ချီ ချီ ကျိ ဖြား ပွင့်လေး  
ဂျိ " ကေး ချီ ဂျိ ဂျိ သို့ သို့ ချီ ချီ ထိုဂျိ ဂျိ  
ကင်း ကွာ " ဖြား စိမ်း ကျော် ပါသန့်  
(ဂ) ကော များ ဖြေ ချီ ချီ အဟိတ် စိမ်း ကျော် သမင်  
တော် ကျော် လိပ် ကျော် စိမ်း " မိတ် သမာ ယာ " ချီ  
ညာ ချီ ချီ ချီ ချီ ကျော် ကျော် " အ  
သန် ကေး ချီ " မိတ် စိမ်း သို့ ချီ ချီ ချီ  
လွယ် ကျော် " ကျော် စိမ်း ထို ချီ လေး သန့်

III

ဝိ ရယပြ ရောက်တွင် " ဆွယ်ကူ မင်း ချီ ချီ  
ချီ " လေး ကေး တင် ချီ ချီ ကျော် စိမ်း အတော်  
ကျော် ကျော် သင် သိသမျှ ကျော် ပါ။

- IV (က) အင်္ဂလိပ်ဘာသာစာအုပ်တစ်အုပ်ကို ဖတ်ရှု၍ အဓိပ္ပာယ်ကို 5  
 ဝေဖန်သည့် ပုဂ္ဂိုလ်တစ်ဦး၏ ဇာတ်ကားတစ်အုပ်ကို  
 ဖတ်ရှု၍ ဖတ်ရှုခြင်းဖြင့် ဖတ်ရှုသူ၏ အမြင်ကို  
 ဖော်ပြရန် ရေးသားရမည်။
- (ခ) ဥပဒေရေးရာတိုင်း အင်္ဂလိပ်ဘာသာစာအုပ်တစ်အုပ်ကို 4  
 ဖတ်ရှု၍ အဓိပ္ပာယ်ကို ဖော်ပြရန် ရေးသားရမည်။
- (ဂ) ဥပဒေရေးရာတိုင်း အင်္ဂလိပ်ဘာသာစာအုပ်တစ်အုပ်ကို 5  
 ဖတ်ရှု၍ အဓိပ္ပာယ်ကို ဖော်ပြရန် ရေးသားရမည်။

မှားကို အကျဉ်းအား ဖြစ်နေကြပါ။

- V အောက်ပါ စကား အသီးအသီး ကို ရှင်းလင်း ဖြစ်စုံစွာ အဘိဓမ္မာ ဖော်ပြပါ။ 10

ဆီး နှိုးငါး အခွံ ဂုဏ်။ ။ သင်္ခါယံ။ ပရိတ္တ ဂုဏ်။  
 ဖုန်သွင်း ဂုဏ်။ ။ ပစ္စိန္တိ။ ။ ရှင်စား။ ။ လောက  
 နှစ်။ ။ ဓမ္မတ ဝဋ် သံသယ ဝိပဿနာ ဝိပဿနာ။ ။  
 သုံးစား ဖွဲ့ပါ။ ။ ဗုဒ္ဓ ကို။

- VI (က) အောက်ပါ ဝိကမ် အသီးအသီး သည် ခေါ်ဆိုသည့် 8  
 က ဂုဏ် နှင့် သက်ဆိုင်သည့်။ ။ ဟိ ဟိ ဟိ  
 ခေါ်ဆိုသည့် ဖြစ်ပါ။ အသွယ် အသွယ်  
 (ခ) ကိုယ်ကြီး ဟောသည့် ဟော အကယ် အကယ် ဟိ ဟိ 2  
 သည်။ ကိုယ်ကြီး ဟောသည့် ဟော အကယ် အကယ်  
 ဟော ဟော ဟော ဟော ဟော ဟော  
 (ဂ) ကြီးမားသော ဟောသည့် ဟော အကယ် အကယ် ဟိ ဟိ 2  
 သည်။ ဟော ဟော ဟော ဟော ဟော ဟော  
 (ဃ) ကြီးမားသော ဟောသည့် ဟော အကယ် အကယ် ဟိ ဟိ 8  
 ဟော ဟော ဟော ဟော ဟော ဟော  
 (င) အသွယ် ဟောသည့် ဟော အကယ် အကယ် ဟိ ဟိ 6  
 ဟော ဟော ဟော ဟော ဟော ဟော



## TAMIL TEXT (FOR FEMALE CANDIDATES).

Paper-Setter and Examiner—MAHAMAHOPADHYAY  
VEDANTAVISARAD ANANTAKRISHNA SASTRI.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. (a) கல் × கண்டு, (b) பொன் × தொடரு, (c) நல் × தூல், 15  
(d) கல் × பலகை, (e) பல × அரசர், (f) கண் + நீர்.

இவற்றை புணர்சிதூற்களுடன் புணாச் செய்க.

2. கல்வியும் × கற்பும் என்ற விடயத்திலொழுகி யோர் வியாஸ 15  
மெழுதுக.

3. இராமசந்திரன், யுதிட்டிரன் இவர்களது சரிதங்களால் தெரிந்த 15  
கொண்ட நீதிகளும் கடமைகளும் யாவை?

4. ஆரியம்தோபாக்கியானத்தை யொட்டி தாமே காணும் நீதிமொ 20  
ழிகளை நன்றாய் விளக்குக.

(a) செய்வன செய்தலே சிறப்பு உண்டக்கும்.

(b) மோனமென்பது ஞானவரம்பு.

(c) தெய்வம் இகழேல்.

5. பாண்டவர் வாரணாவதம் செல்லுதலை ஆதியோடந்தமாய் வினை 15  
விக்குக.

6. Translate int. English the following passage :—

ஒரு ஸன்யாஸி ஒரு நகரத்தையடைந்ததும், பொது சத்திர 20  
மென நினைத்து அரசருடைய அரண்மனைக்குச் சென்றான். சற்று  
நேரம் கழித்து இளைப்பாறுவதற்காக ஜமககாளத்தைப் பரப்பினார்.  
அதைப் பார்த்து சில காவலர் இந்த இடத்தில் என்ன வேலையென்று  
கேட்டார்கள். இன்று இச்சத்திரத்தில் இருப்பதாக எனது கருத்து  
என்று ஸன்யாஸி உத்தரம் சொன்னார். காவலர்கள் கோபத்துட  
னிது அரண்மனையென்று சொல்லி வெளியே போகும்படி சொன்  
னார்கள். இதை கவனித்துக் கொண்டிருந்த அரசன் ஸன்னி  
யாஸியிடம் வந்து புன்சிரிப்புடன் இது பார்வையில்லையே சத்திர  
மல்ல இது தான் அரண்மனையென்று தெரியவில்லையா என்று சன்  
னியாஸியைக் கேட்டான்.

## TELUGU TEXT (FOR FEMALE CANDIDATES).

Paper-Setter and Examiner—MR. B. RAMCHANDRA RAO, M.A.,  
PH.D.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. “లక్ష్మీప్రసాదము” చదువుటవలన ఉచితము గ్రహింప వలసిన 20 సీతులెన్నియో వ్రాయుడు.
2. “జాతీయవిద్య” అననేమి. ప్రస్తుతము మీరు నేర్చుకొను 20 విద్యకును జాతీయ విద్యకును తారతమ్యమేమి.
3. “శ్రీవిద్య” వృద్ధిపొందుటకు యేవిధమైన విధానములు నియమింప వలెనో వ్రాయుడు.
4. “సాంకేతికవిద్య” అననేమి. దానియొక్క ఉపయోగములు 20 ఉదాహరించుచు వ్యాసము వ్రాయుడు.
5. “లక్ష్మీప్రసాదము” లో వర్ణింప బడిన సంఘస్థితిని గూర్చి 20 విపులముగా వ్రాయుడు.

## URDU TEXT (FOR MALE CANDIDATES).

Paper-Setters— { KHAN SAHEB REZA ALI WAHSHAT.  
MAULVI MAHFUZUL HAQ, M.A.  
,, MD. YUSUF.

Examiner—KHAN SAHEB REZA ALI WAHSHAT.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English either (a) or (b) :—

20

(a) جب سیٹا جی کے جمال و کمال کا آراہ تمام آرہرت میں  
پھیل گیا تو درر و نزدیک کے راجہ انکے خواستگار ہوئے - مگر رام



چندر جی کے سوا جن کا آغاز شباب تھا اور جنہوں نے فن تیر اندازی میں دستگاہ کامل پیدا کی تھی کوئی کامیاب نہ ہو سکا - انہوں نے کمان کو صرف کھینچا ہی نہیں بلکہ اپنی شہزوری سے اُسکے دو تکرے کر دیے - پس عہد کے بموجب اُنکے ساتھ سیتا جی کی شادی ہو گئی اور وہ اُنکو لیکر آجودھیا میں واپس آئے جو اُنکے باپکا دار السلطنت تھا -

(b) بچہ پہلے چیزوں کے نام سیکھتا ہے اسی واسطے جب کوئی چیز لینی چاہتا ہے تو فقط اُسی کا نام لیکر پکارتا ہے - بھوکا ہوتا ہے تو ”دو دو“ کہتا ہے پیاسا ہوتا ہے تو ”مم مم“ کہتا ہے مٹھائی کو جی چاہتا ہے تو ”چیچی“ بلکہ ”چی“ کہتا ہے - جب گویائی میں ذرا زور رفتار پیدا ہوتا ہے تو فعل بھی لگانے لگتا ہے مگر غلط سلط - رفتہ رفتہ حررف لگا کر باتیں کرنے لگتا ہے زبان کے انجان پردیسیوں کو دیکھا اور خود سیاحتوں میں تجربہ ہوا کہ غیر ملک میں جا کر لین دین کام کاج میں پہلے صرف اسموں سے کام نکالنا پڑتا ہے مثلاً ررتی چاہتے ہیں تو پیسے دکھاتے ہیں اور کہتے ہیں کہ ”نان“ یعنی پیسے موجود ہیں ررتی دو

2. Translate into English either A or B, and give explanations where necessary :— 20

A.

کرے دشمنی کوئی تم سے اگر  
جہاں تک بنے تم کر درگذر  
کرر تم نہ حاسد کی باتوں پہ غور  
جلے جو کوئی اُسکو جلنے دو اور  
اگر تم سے ہو جائے سرزد قصور

تو اقرار توبہ کر بالضرور  
بدی کی ہر جس نے تمہارے خلاف  
جو چاہے معافی تو کردر معاف  
نہیں ! بلکہ تم اور احسان کر  
بھلائی سے اُسکو پشیمان کر

B.

دائہ خرمن ہے ہمیں قطرہ ہے دریا ہم کو  
 آے ہے جز میں نظر کل کا تماشا ہم کو  
 اس بلندی پہ دیا چرخ نے پہنچا ہم کو  
 کہ فلک آنا نظر خال سے چھوٹا ہم کو  
 آن پہنچی سرگرداب فنا کشتی عمر  
 ہر نفس باد مخالف کا ہے دھوکا ہم کو  
 ہوسکے لاغری و ضعف کہاں مانع شوق  
 تیری جانب پر پرواز ہیں اعضا ہم کو

3. Give the meanings of any ten of the following words :— 10

تقریر - مانع - مطالعہ - مہارت - سیاح - احسان - میلان -  
 مشاغل - وقتاً فوقتاً - اکارت - رحلت - التفات - بوالہوس -  
 ضعیف العقل - مسکن -

4. Give the gender of the following words :— 10

کوشش - دریا - دنیا - شربت - درہ - پیاس - تعظیم - انصاف -  
 زبان - خیال -

5. What is اسم تصغیر How is it formed in Urdu? Give 15  
 examples.

6. Translate into Urdu :— 25

Our village is small, but it has a school of its own. There is a tank in front of the school. You will see some fine trees around it. There is also an open field near by. Boys play there in the evening. There is a small flower-garden in the school compound. The boys work in it by turn. They love their plants dearly.

### URDU TEXT (FOR MALE CANDIDATES).

#### ADDITIONAL PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :— 10

اہلیا بائی - یہ نیک سیرت والی سندھیہ کے خاندان سے تھی -  
 ۱۷۳۵ء میں پیدا ہوئی - ملہار راؤ ہلکر کے بیٹے سے اس کی شادی

ھوئی - ابھی بیس برس کی بھی نہ ہونے پائی تھی کہ بیوہ ہو گئی - اُس کا شوھر اپنے باپ کے سامنے ہی اس جہان سے انتقال کر گیا - صرف ایک لڑکا اور ایک لڑکی یادگار چھوڑے - ملہار راؤ کی وفات کے بعد اُس کا پوتا جانشین ہوا \*

2. Either, Give in your own words the story of Sulṭān Nāsir'. 10  
ud-Din.

Or, Give the summary of the poem ۛ

3. Translate into English :—

35

جہاز پر میرے ہم کلاس تین صاحب تھے - ایک ایرانی، دو ارمنی - ایرانی صاحب کو پہلے تو میں انگریز سمجھا - باتیں کرنے سے خیال ہوا کہ فرنچ ہیں - بعد میں معلوم ہوا کہ ایرانی ہیں - آقا محمد نمازی شیرازی نام ہے - شنگھائی سے آ رہے ہیں اور وطن جارہے ہیں - شنگھائی میں بہت بڑے تاجر ہیں - یہ سن کر مجھے بہت بڑی خوشی ہوئی - شیرازی صاحب اپنے ملک کے شیدا تھے - دیوتک باتیں ہوتی رہیں - دنوں ارمنی بمبئی میں تجارت کرتے ہیں اور اپنے وطن بصرہ کو آ رہے ہیں - یہ دنوں ارمنی انگریزی توہی پہنتے تھے - بصرہ پہنچتے ہی ترکی توہی پہننے لگے - میں نے پوچھا تو کہا ”ہم ترکی رعایا ہیں - لہذا ہمیں یہاں ترکی توہی پہننی ضروری ہے“ \*

4. (a) Give the Urdu plurals of any four of the following :— 4

بندہ - گھڑی - شاخ - نعمت - کنواں - خوشبو

(b) Give the genders of any five of the following :— 5

گھٹا - تبسم - تمنا - شربت - گھی - مالا - زبان

(c) Correct the following sentences :— 6

میرا کتاب چوری ہو گیا - میں دھاکہ سے آئے ہیں - تمہارے نوکر کو بلا دو - ہم کھانا کھائے ہیں - اُس کا گھر میں اس وقت کوئی نہیں ہے - مجھ کو کل سے بخار آتی ہے \*

5. Translate into Urdu :—

30

A very poor man went to a very rich man, and said, ' We two are sons of Adam and Eve, therefore we are brothers; you are very rich

and I am very poor; give me a brother's share.' The rich man, on hearing this, gave to the poor man one pice. The poor man said, 'Oh, sir! Why do you not bestow upon me a brother's share?' He replied, 'Be content, my good friend; if I give all my poor brothers one pice each, I shall not have anything remaining.'

URDU TEXT (FOR FEMALE CANDIDATES).

*Paper-Setter*—MR. S. KHUDA BUKHSH, M.A., B.C.L.,  
BARRISTER-AT-LAW.  
*Examiner*—KHAN SAHEB REZA ALI WAHSHAT.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

40

ہمیشہ اپنی نظر میں سبک میں رہتا ہوں  
دیا ہے اوروں کی نظروں میں گو رفتار مجھے  
کبھی ہے جی میں نہ گذرا خیال سرتابی  
برنگ سایہ بنایا سے خاسنار مجھے  
تمہارے وعدے بتان خوب میں سمجھتا ہوں  
رہا ہے ایسے ہی لوگوں سے کار و بار مجھے  
یہ کرن برق تجلی ہوا ہے آفتِ جان  
کہ ایک دم نہیں جوں شعلہ اب قرار مجھے  
جفا و جور تو ظالم سبھی گوارا ہیں  
مگر یہ اسم جدائی ہے ناگوار مجھے

2. Translate into English :—

20

شاعرِ قدرت کے دیوان میں ایک سے ایک مضمون نیا ہے مگر یہ  
لطیفہ بھی کچھ کم نہیں کہ شاعری کا چراغ دکھن میں روشن ہو۔  
اور ستارے اس کے دلی کے آفاق سے طلوع ہوا کریں - اس عہد کی  
حالت اور بہاشا زبان کو خیال کرتا ہوں تو سوچتا رہ جاتا ہوں کہ یہ  
صاحبِ کمال زبانِ اردو اور انشاءِ ہندی میں کیونکر ایک نئی صنعت

کا نمونہ دے گیا اور اپنے پیچھے آنے والوں کے واسطے ایک نئی سڑک  
کی داغ بیل ڈالتا گیا \*

8. Translate into Urdu :—

40

'Of all things that have life and sense we women are most wretched. For we are compelled to buy with gold a husband who is also—worst of all!—the master of our person. And on his character, good or bad, our whole fate depends. For divorce is regarded as a disgrace to a woman and she cannot repudiate her husband. Then coming as she does into the midst of manners and customs strange to her, she would need the gift of divination—unless she has been taught at home—to know how best to treat her bed-fellow.'

### KHASI TEXT (FOR FEMALE CANDIDATES).

*Paper-Setter and Examiner—MR. ROY ROWLAND THOMAS, M.A.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer Questions 3, 5, 8, 9, and any other two.*

*The figures in the margin indicate full marks.*

1. Iathuh ia ka Phawer kaba don kane ka jingsneg. 'Don 15  
ki ba'm suk ban ngat tang ma lade khlem da pynngat ia kiwei ruh  
ha kajuh ka jingsniew.

2. Iathuh khana ia ka Phawer shaphang U Kulai, U Masi had 15  
U Ksew.

3. Explain with reference to the context :— 20

(a) Duk-suk-Riewspah-Jynjar-trah.

(b) Tang uba nri la pynmong uba lah ban map pat ia ngi.

(c) Namar ka syrngiew u bred ia met.

(d) Ynda la shiah ia ka iktiar wat u siem hi u kylla riew 15  
madan.

4. Lada la proh ka buit kumba saphup ka tmoh me la dei ban 15  
da peit shuwa ba men ryngkoh. Iathuh ia ka Phawer jong kane ka  
jing kynthoh.

5. Explain with reference to the context :— 20

(a) La bunsien ruh nga iohi te

Sha iew ka leit ban siew.

Ka dei ka Rngai, ka Puri, ne

Ka Thwei ki jingphohsniew.

(b) Ka Prem-miet pat ka wallam ia

Ka khmat ba jaw ka syep

Ban phuhmat, had ban rykhie sngewbha

Sawdong ka Lyngwiar Trep.

6. Iathuh ha ka ktien bajem kumno u nongthoh jong phi u 15  
thoh padiah shaphang ka Pyrem.

7. Iathuh shaphang ki sim jong ka Svnrai Sohra kat kum u 15  
nongthoh jong phi.

8. Translate the following passage into English :—

15

Ka unsaw shisien ka la lam ia uwei u myrsiang uba mut ban ingi sha shilliang wah, bad ka la lynthaw ia u shapoh ka kshaid, te u la mynsaw la jam jop, tang ba um pat iap. Ynda kham harum ka la kyntait ia u sharud um, bad hangta u la thiah lytar. Khala khala ki skain ki la wan ia boi ban kjit ia ka snam na ka jingmysaw jong u. Te u dingkhied uba iaid najan nangta, ba u i sangsot ia u, u la mut ban ia beh lem ia ki. Hynrei u myrsiang u la nghuh arti arjat ia u, u la ong, 'Ieh, ieh, kynrad ksiar, wat pynthut ia ki.'

9. How are the distributive numeral adjectives formed in Khasi? Illustrate your answer fully.

15.

### PORTUGUESE (FOR FEMALE CANDIDATES).

*Paper-Setter and Examiner*—P. BRAGANCA CUNHA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any two of the following passages into English :—

20.

(1) Tu não és, oh mulher, só a obra-prima de Deus, também o és a dos homens : estes exornam-te com a beleza dos seus corações.

Tecem-te os poetas os veus com as fios d'oiro da sua phantasia; immortalism os pintores a forma do teu corpo.

O mar dá as suas perolas, as minas o seu oiro, os jardins de varão as suas flores, para te embellezarem, para te cobrirem e tornarem-te mais preciosa.

O desejo dos corações humanos derramou a sua gloria sobre a tua juventude.

Tu és meio mulher e meio sonho.

(2) Era no mez de Maio. O calor suffocante do meio-dia parecia infinitamente longo. A terra secca bocejava de sede. Quando ouvi uma voz chamar, do outro lado do rio :—" Vem, meu bem amado."

Fechei o meu livro e abri a janella. Vi um grande bufalo, com os flancos manchados de lama, que passava a beira do rio, fitandome com os seus olhos placidos e pacificos. Um rapazito, na aqua ate aos joelhos, chamava o para tomar o seu banho. Sorri, interessado, e um doce calor me afflorou o coração.

2. Explain in Portuguese in a few words what Tagore wishes to convey in the following :—

20.

Não sepultes dentro de ti, minha amiga, o teu segredo. Diz m'o só a mim baixinho.

Murmura-me o teu segredo, tu que tens um tão meigo sorriso. Ouvi-lo-ha só o meu coração, e não os meus ouvidos.

A noite é profunda, a casa silenciosa, os ninhos das aves estão engolphados no somno.

Diz-me o segredo do teu coração por entre as tuas vacillantes lagrimas e os teus perturbados sorrisos.

3. Write a short story in Portuguese about " The Monsoon."

25

4. Translate into Portuguese :—

10

Which of the boys is the one whom you like best?

What did you think of when doing this task?

Look at those flowers how beautiful they are!

5. Write your impressions on Rabindranath's "Jardineiro d'Amor." 26

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	.. SRISCHANDRA DASGUPTA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, What strikes you as the most interesting episode in the lesson "শকুন্তলার পতি-গৃহে যাত্রা"? Show why you give it preference. 10
- Or*, Briefly tell the story of Kabuliwalla by Rabindra Nath Tagore. 10
2. Explain with reference to the context *one* passage from each of the following four groups :— 24

GROUP A.

(a) যেখানে স্নেহের বন্ধন নাই, প্রেমের টান নাই আত্মরে ছেলের মত কথায় কথায় আবদার করিতে গেলে সেখানে শুনিবে কে ? ছই একবার ভিক্ষা মিলিবে, তাহার পর উপহাস বিদ্রূপ, অবশেষে সম্মার্জনী ।

(b) তব ভাল উদ্ভাসিয়া এ ভাবনা তড়িৎপ্রভাবৎ এসেছিল নামি ।

"এক ধর্মরাজ্য-পাশে খণ্ড-ছিন্ন বিক্ষিপ্ত ভারত  
বৈধে দিব আমি ।"

GROUP B.

(a) একটা সমগ্রজাতি কেবল, রামমোহন রায়, ষারকানাথ ঠাকুর, দেবেন্দ্রনাথ ঠাকুর, কেশবচন্দ্র সেন, মালাবারি বা রমাবর্জীর ছাঁচে ঢালা হবে—এমন আশা করি না । কিন্তু তা' বলে, যে দেশের মধ্যে এই সব মহৎচরিত্র লোক জন্মগ্রহণ করেছেন, সে দেশের জাতীয় চরিত্র উপেক্ষা করবার নয় ।

(b) এখন দেখি, এ বেগ আমার একার নহে ; যে সময়ে উঠানে ছায়া পড়ে, নিত্য সে সময় কুলবধুর মন মাতিয়া উঠে ; জল আনিতে বাইবে ; জল আছে বলিলেও জল ফেলিয়া জল আনিতে বাইবে ।



## GROUP C.

(a) গভীর তোমার কাজল-নয়নে

ছল ছলি' জল পড়িছে এসে'

তপ্ত বনানী ডাকিছে তোমারে—

দাঁড়াও কণেক ফুলের দেশে ।

(b) রাবণ আমাকে ইতিপূর্বেই নিহত করিয়াছে, আমাকে পুনর্বার নিধন করিবার চেষ্টা তোমার পক্ষে উচিত নহে ।

## GROUP D.

(a) কাবা-মন্দিরে কোলাহল উত্থিত হইল। দয়ার্জ চিত্ত তমিন পরিবারের লোকেরা দৌড়াইয়া আসিয়া তাহাদিগকে শত্রুর কবল হইতে রক্ষা করিল। তাহাদের তাদৃশ সাহায্য না পাইলে মোহম্মদ ও তদীয় অনুচরবর্গের প্রাণনাশ ঘটত।

(b) দৈন্তের মাঝে আছে তব ধন,

মোনের মাঝে রয়েছে গোপন

তোমার মস্ত অগ্নিবচন,

তাই আমাদের দিও ।

পরের সজ্জা ফেলিয়া পরিব

তোমারই উত্তরায় ।

3. Give the gist of the lesson কাজ করা by Bhudev Mukherjee in your own words. 6

4. Correct all errors in the following :— 6

তখন আষাড় মাস, বাগানে কুল কুমুমগুলি ধীরে ধীরে সৌরভ বিকাশ করিতেছিল, বৃষ্টি ধারায় দল গুলি আঁত্র হওয়াতে মনে হইতেছিল কোন সুন্দরি স্বীয় মুখখানি শীতল জলে ধুইয়া যেন উজ্জ্বলে আসিয়া দাড়াইয়াছেন। আকাশের গায় মেঘগুলি কখনও পশুপক্ষের জায়, কখনও পাহাড় খণ্ডের জায়—কখনও বা মূল ফুল মাল্যের জায়—ইত্যন্ত : বিক্ষিপ্ত ভাবে সমীর চালিত হইয়া উপবিষ্ট হইতেছিল। অদূরে গজাতরঙ্গ ঢেউ সহকারে বেগে ছুটিতেছিল ও সান্ধ্য-বায়ু ছলিতে ছলিতে পবনের সঙ্গে ক্রিয়া করিতেছিল।

5. Fill up the blanks in the following :— 6

তোমার — পালন করিতে আমি কবে—হইয়াছি? তুমি আমার প্রতি যে সকল — আনয়ন করিয়াছ, তাহা সর্কেব —। তুমি আমাকে — রূপে জানিয়াও যে এরূপ — ধারণা করিতে পারিয়াছ, ইহা বড়ই — বিষয়।

6. Amplify the idea contained in any of the following :— 15

(a) যে মাটিতে পড়ে লোক উঠে তাই ধ'রে' ওই বাক্যটি স্মরণ করিয়া তোমার নিকটে যে সুবিধা উপস্থিত তাহা প্রত্যাখ্যান করিও না।

(b) আলো সবন্ধে শত শত বক্তৃতা করার অপেক্ষা সামান্য একটা দেশলাইএর কাটি জ্বালাইলে বক্তব্য বিষয় বেশী পরিষ্কার হইবে।

7. Translate into Bengali :—

15

Chaitanya was born on the 18th of April, 1486. His father Jagannah Misra was originally a native of Sylhet. He had married Sachi Devi—daughter of Nilambar Misra. Later he came to Nadia to prosecute his studies in Nadia tols and settled there. Jagannath was a pious man, who cared not for wealth. He lived an austere life following a high spiritual standard. People who were not as erudite and capable as Jagannath followed lucrative avocations and hoarded wealth. Sachi Devi, his wife, once told him to follow their example and amass a fortune. Jagannath in reply pointed to the birds of the sky and said : ' These birds are perfectly happy, they sow not, nor do they reap. They depend on their heavenly Father who supplies them with food. Learn the lesson, oh wife, of sweet resignation. Earthly riches will not give that contentment which one gets by leading a life of spotless honesty and absolute reliance on the Lord.' Sachi was pleased with the answer, for she too had an ascetic temperament and valued faith and renunciation above everything else. Chaitanya was born of such noble parents.

8. Write an essay on any one of the following subjects :—

20

(a) The advantages and disadvantages of living in a large city. Facilities of union; medical treatment; education and trade; epidemics; want of domestic feeling and sympathy; lack of discipline and spiritual training; risk of catching revolutionary ideas.

(b) Which of the six seasons of Bengal do you love best? The climatic condition, scenery, communication, diseases, flowers and fruits, food.

(c) Life and work of any one of the following three men :—(a) Akbar, (b) Asoka, (c) Sivaji. Family, environment at birth, gradual development of power, special features of character.

## HINDI.

Paper-Setters— { Mr. NALINIMOHAN SANYAL, M.A.  
,, DINANATH SARMA, M.A., B.L.

Examiner—PANDIT SIBNARAYAN LALA.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate two of the following passages into English, giving the context in each case :—

13

(a) सुनहु बिलय मम बिटप अशोका ।

सख नाम करहु मम शोका ॥

नूतन किसलय अनल समाना ।

देहु अगिनि मम करहु निदाना ॥

कपि करि हृदय बिचार, दीन्ह सुद्विधा डारि तब ।

अनु अशोक अंगार, दीन्ह हरषि डठि कर लियो ॥

(b) सुन्दरी के सुर को भकार की तुलना नहीं हो सकती थी—उस स्वर में प्राणों को व्याकुलता सूँझितो हो रही थी। स्थान, काल, गायिका का रूप, उसका वेदनामय स्वर—इन सभी ने मिलकर एक अपूर्व भाव का संचार किया था। विपुल जनसंघ उस भाव से लब्ध और तन्मय हो गया था।

- (c) कीट कहते हैं ए बनेंगे कीट पावस के,  
लते' कहते हैं लते' इनके उड़ावे'गे।  
दूब कहती है दूब दावे'गे ए दांतों तले  
टण कहते हैं इन्हे' लश सा बनावे'गे।  
तूल कहती है ए उड़ेंगे तूल-पुंज सम,  
धूल कहती है धूल में ए मिल जावे'गे॥

2. Explain two of the following with reference to the context :—

16

- (a) चिंताज्वाल शरीरवन दाबा लगि लगि जाय।  
प्रकट धुवां नहिं देखिये उर अंतर धुंधवाय ॥
- (b) सियकर परधर-रदन-चवाऊ।  
यदपि किग्रे बहु मिटन उपाऊ ॥  
फैलत फिरि पुरजन महुँ कैसे।  
दबो देह ककुर विष जे से ॥
- (c) आगे खड़ी रानि मग साहीं।  
पौछे भूप मनह' परछाहीं ॥  
सोहत बीच धेनु यहि भांती।  
सम्या सङ्ग मनह' दिन राती ॥

3. Either, What is कर्ण रस? Explain the expression ईद में महरंम। Show that the extract ईद में महरंम in your text-book breathes an air of कर्ण रस throughout.

12

Or, Write, after Nazir, the story of the birth of Srikrishna.

12

4. Give in Hindi the substance of the following in not more than five lines :—

8

ज्ञान समुद्र है, और यद्यपि उसपर हिलोरे' लिता हुआ सुन्दर जहाज। ज्ञान सूर्य है, और पुस्तक हमारे घर की प्रकाशित करनेवाली किरणें। ज्ञान सोने की खान है, और यद्यपि है हमारे अङ्ग की शोभा बढ़ानेवाली सुनहली गड़ने। ज्ञान वायु है, और यद्यपि वायु को चलाकर ठंडक देनेवाली पंखे। ज्ञान अग्नि है, और यद्यपि अग्नि से उत्पन्न दीपक। ज्ञान अन्न का भांडार है, और पुस्तकें उसकी बनी हुई रोटियां।

5. Translate the following into Hindi :—

16

Four years afterwards the king was in the woods by the Yamunā river. Suddenly a sweet scent crossed his path. What could it be? The king walked along the river bank towards the place from which the sweet scent came, and presently he beheld a celestial maid of fair complexion and black eyes. The king had never beheld



migrated from Dakhimpur to the Nowgong district. Sankar's mother died almost immediately after his birth and the boy was trained at the hands of his grandmother. Even as an infant it is said he showed promise of greatness. He attended the *Tol* of a Brahmin pandit Mahendra Kandali by name and here his teacher also was impressed.

2. Explain clearly either চিন্তা প্ৰসব কল or বিজ্ঞানিত অহঙ্কাৰৰ উৎপত্তি and give an example if possible.

3. Write a paragraph on ধনৰ ব্যবহাৰ।

4. Explain with reference to the context any two of the following :—

(a) বচকৰ বিজ্ঞা বুদ্ধি অনুসাৰে পুথি সাৰুৱা বা জাবৰুৱা হয়, ঈশ্বৰ বিজ্ঞা বুদ্ধিৰ আদি আৰু অন্ত তেওঁ বিজ্ঞানময় বুদ্ধি ময় আৰু জ্ঞানময় এতেকে তেওঁ বচা বিশ্বৰে সাৰময় পুথি তাক এনেয়ে বুজিব পাৰি।

(b) সংসাৰ এৰি অবণ্যত বাসলৈ কিছু উজ্জ্বল কিয়নো অবণ্যত প্ৰলোভন, সংসৰ্গ আদি বাধা বিলাক নাই।

(c) নয়ত্ৰী সজ ব্যৱহাৰৰ অনুপান।

5 Give the substance of either poem ছায়া-চিত্ৰ or মৰমৰ পখী।

6. Explain with reference to the context any two of the following :—

(a) সুত্তনো বীনাৰ এবে সুৰ তান লয়,  
যি সুৰত পৰিছিল কঠিন হৃদয়,  
গহীন জোঁকাৰ হায় ক'ত গৌন গল,  
পানীৰ ভুমুক যেন পানীত লুকাল।

(b) অলসতা পাপ মলি গাব পৰা ধোৱা,  
জীৱন যুজলৈ ভাই আগবাঢ়ি যোৱা।

(c) আহাঁ মোৰ চিৰ সঙ্গী, আহাঁ প্ৰিয় সখা,  
তোমাৰ মুখকে চাই দুখ পাহৰিম।  
দিব্যৰূপ ধৰি তুমি দিবা যোক দেখা,  
যিদিমা চিতাক মই সাৱতি ধাৰম।

7. Give the meanings of the following :—

জলজোখ, সোণৰ চেকুৰা, অনুষ্টুপীয়া সুখ সম্পদ, দুৰ্গতিৰ ধামখুঁয়া,  
প্ৰকৃতিৰ ক্ষতিপূৰণ স্বভাৱ, স্বতন্ত্ৰবীয়া বৃত্তি।

8. Explain any one of the following :—

(a) মহলমানক চেচনি বুজনি দি চেচা কৰা মানে, মহলমানৰ আগত গলবস্ত্ৰ হৈ আমাৰ গোটেই দেশখন তেওঁলোকক দান কৰা, আৰু তেওঁলোকক খুজি পাবিলে কবতলীয়া হৈ কোনোমতে বজা নামটো লৈ পেট প্ৰসৰ্ত্তাই থকা। এনে কাৰ্য্য মই হলে জীয়াই থাকোঁতে কবিতা নোৱাৰোঁ। চক্ৰবৰ্ত্তী সিংহৰ শৰীৰত থুলাই থুলাই এটোপা তেল থাকে

মানে চক্ৰধ্বজসিংহই মহলমান পাটচাৰ ওচৰত সুৰ নোদোৱায়। এইটো ঠিক। জয়ধ্বজ সিংহ সৰ্গদেৱৰ দিনত সনা আসামৰ কলঙ্ক সোণা হয় চক্ৰধ্বজে গুচাব নহয় চক্ৰধ্বজ সমূলে বিনাশ হব।

- (b) আজি যদি মিলো সবে আসাম নিবাসী,  
পৰ্বত কি লতাবন, কাটি কৰি থান থান,  
হব পাবো একে দিনে অট্টালিকা বাসী,  
সজাৰ অসম পাবো ধনে, সেই দিনে,  
বঙ্গকন্তো কব পাবো, বৰষেকি মাদ্ৰাচ আৰু  
সমভাবে চাব পাবো ইংলণ্ডৰ পিনে।

9. Write an essay in Assamese on any of the following subjects :—

25

- (a) ব্ৰহ্মপুত্ৰ নৈ  
গুৰি — পাৰৰ নগৰ আৰু গাওঁ — খেতি-বাতি — বেহা  
বেপাৰ—মাজেদি গৈযোৱা দেশৰ বুৰঞ্জী।  
(b) আসামত কানি।  
(c) এজনী অসমীয়া ভাঙৰ মানুহৰ জীৱনচৰিত।  
(d) সংসঙ্গ।

### MARATHI.

Paper-Setters— { PROF. D. R. BHANDARKAR, M.A., PH.D.  
MAHAMAHOPADHYAY PANDIT SITARAM SASTRI.

Examiner—MAHAMAHOPADHYAY PANDIT SITARAM SASTRI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Write an essay in Marathi on any one of the following :— 20  
(a) The pleasures of reading or a cricket match.  
(b) Your ideal of a happy life or a favourite book of yours.  
(c) The necessity of *dharma* in the life of a man or of punctuality.  
2. Translate one of the following into Marathi :— 15

(a) Suddenly a bright thought flashed through my mind. Without taking my eyes off the animal before me, I put a double charge of powder down the right-hand barrel, and tearing off a piece of my shirt, I took all the money from my pouch, three shillings in six-penny pieces and two anna pieces, which I luckily had with me in this small coin for paying coolies. Quickly making them into a rouleau with the piece of rag, I rammed them down the barrel, and they were hardly well home before the bull again sprang forward. So quick was it that I had no time to replace the ramrod, and I threw it

into the water, bringing my gun on full cock in the same instant. However, he again halted, being now within about seven paces from me, and we again gazed fixedly at each other, but with altered feelings on my part.

(b) Once upon a time there was a king in the north who had won many wars, but now he was old. Yet he took a new wife, and then another prince, who wanted to have married her, came up against him with a great army. The old king went out and fought bravely, but at last his sword broke, and he was wounded and his men fled. But in the night, when the battle was over, his young wife came out and searched for him among the slain, and at last she found him, and asked whether he might be healed. But he said 'No,' his luck was gone, his sword was broken, and he must die. And he told her that she would have a son, and that son would be a great warrior, and would avenge him on the other king, his enemy. And he bade her keep the broken pieces of the sword, to make a new sword for his son, and that blade should be called Gram.

3. What do you think of महादेव गोविंद रानडे as a social reformer ? 10

4. Narrate in your own words all the incidents that took place on Kondana, when the fort was captured at midnight by the Marathas. 10

5. Explain in Marathi the following :— 20

हे वामनैकपद भूमि, नसोनि जंघी  
एके दिशींच दिनराज नभास लंघी ॥  
वाग्नि वानर विलंघित होय तो कीं  
लोकीं नसे नलयशस्त्रना विलोकीं ॥१॥  
ज्याची पदे' धरिति देवशिरो ललामीं  
स्वाराज्जो मिरवितो गजराजगामी ॥  
तो वज्रपाणि बहुलोचन कांति भारी  
हा पाह्णिजे तरि वरी नलरूपधारी ॥२॥

6. Parse the following :— 10

योडासा कोमलपणा हि धरण्याचे त्याने' मनांत आणिले' ।

7. Give the sense of the following :— 11

दुष्ट मनुष्य आपल्या शत्रूला उपरोधिक व मत्सरपूर्ण भावने' कोलू लागला ह्याज  
त्यांत त्याचा हा एक मोठा हेतु असतो कीं, आपल्या प्रतिपत्त्याने' आपल्याशीं  
अधरीतर करावे'. ह्याज मग आपले' हे गालिप्रदानान्न वाटले तसे' सोडण्यास  
त्यास हरकत वाटत नाही'. पण तोच जर प्रतिपत्ती अगदी' गम्य बसला, तर  
याचा फार बईट वाटून त्या प्रतिपत्त्याचा दसपट तिडकारा येतो, या प्रमाणे  
उदयभा'ची या वेळी' स्थिति झाली.

ORIYA.

*Paper-Setters*— { MR. ARTABALLABHA MAHANTI, M.A.  
,, PRIYARANJAN SEN.

*Examiner*—MR. ARTABALLABH MAHANTI, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into Oriya any one of the following passages :—

(a) The minister went on his way out of the city, and in due time reached the door of his dependant, who received him with every mark of respect. While he was staying as a guest in the dependant's house, he made inquiries respecting the causes of the marvellous wealth and brilliant success which had befallen the dependant. He then learnt for the first time that all this prosperity was due, not to the dependant himself, but to an adopted son, whom he had found in the jungle with one of his feet bleeding from the loss of a sixth toe. 14

(b) An English sailor had been confined for several years in a French prison; but he was set free at the peace. After reaching London he came across a man who had a number of birds for sale. He, reminded of the long years which he himself had spent in prison, could not bear to see the little creatures thus confined : so he bought the cage and all the birds. The man wondered what he could mean to do with so many birds. Instead of walking away with his purchase, he opened the door of the cage, and began taking out the birds one by one and letting them fly away. 15

2. (a) Write a note on what you learn from either 20  
ଗାଗାୟା ସାହିତ୍ୟ or ପରିପ୍ରସର ସୁଖ

(b) Explain the title ରତ୍ନାମଣି What had Ratuamoni 20  
to do with the same ? What part was played by Sasauka  
Deva in the story of ରତ୍ନାମଣି



3. Explain fully in simple Oriya any two of the following :—

10

(a) ଅଦ୍ୟାପି ତାହା ହିଁ କଟକର ବୃଦ୍ଧପିଣ୍ଡରୂପେ, ବ୍ରାହ୍ମଣ୍ୟଧର୍ମର ସମାଚର ରାଜଧାନୀରୂପେ ଏବଂ ରାଜନୀତି ପାଣ୍ଡିତ୍ୟର ସୁଦୃଢ଼ ଦୂର୍ଗରୂପେ ପ୍ରତିଷ୍ଠିତ ରହି ଅଛି ।

(b) ପରସ୍ତ୍ରୀକାଚରତା ଅତି ଦୁଷ୍ଟିତ ବ୍ୟାପି । ସମସ୍ତଙ୍କ ମଞ୍ଜାଳରେ ନିଜର ମଞ୍ଜାଳ ସଂନିବିଷ୍ଟ ନାଶି ଶୁଦ୍ର ନୀଚ ଉର୍ଷାରାବକୁ ହୃଦରେ ସ୍ଥାନ ଦେବ ନାହିଁ ।

(c) ବୃହତ୍ ନଦୀମାନଙ୍କ ସଙ୍ଗମସ୍ଥଳରେ, ବହୁଲବୃଷ୍ଟି ନିରକ୍ଷବୃତ୍ତି ନିକଟସ୍ଥ ପ୍ରଦେଶରେ, ଶକ୍ତିର ବୃଷାଭାବୁଳିତ ମେରୁସନ୍ନିହିତ ଅଞ୍ଚଳରେ ସମୁଦ୍ରକଳର ଲବଣାକ୍ରନ୍ତ ଅପେକ୍ଷାକୃତ ଅଳ୍ପ ।

4. Clearly bring out the idea contained in the following 3 stanzas :—

(a) ଉଠିଲା ଦୁଃଖିମଥାନ ଚେତି ଧୂମ ସଘନେ  
ପରାମ୍ଭରେ ଆତ୍ମାପ୍ରାୟେକ ମିଶିଗଲା ଗଗନେ ।

(b) ନରେ କାଦମ୍ବିନୀ କୋଳେ ଭରସୁଦ  
ହେମପ୍ରଭା ଗିଣି ଦିଶେ ।  
ତ୍ରିଦିବ ଦେବତା ସୁନାସୀରଙ୍କର  
ଜନକ କାର୍ମୁକ ବି ସେ ।

5. Construct sentences with the following words :— 7  
ଗହ୍ଫଣା, ପାଗ, ଉଠିଆ, ଦୁଆବୁଆ, ଉଷର, କଳାହାଣ୍ଡିଆ, ଗୋରା ।

6. Write an essay in Oriya on one of the following subjects :— 20

- Health is wealth.
- Honesty is the best policy.
- Jute cultivation.
- The life of any great man of the past.

## NEPALI (PARBATIA).

Paper-Setters—{ RAI SAHIB HARIPRASAD PRADHAN.  
MAJOR THAPPA.

Examiner—MR. SURYA VIKRAM GEWALI, B.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into Nepali any two of the following passages :—

30

(a) As a dog was crossing a brook with a bone in his mouth, he saw his own image in the clear water, and mistook it for another dog carrying another bone. Not content with what he himself possessed, the greedy creature snatched at the prize which he saw below. In doing so, he of course dropped the real bone, which fell into the brook and was lost! The greedy, grasping at more than they have, often lose even that which they might in peace have enjoyed.

(b) When the Czar, touched with her noble bearing, asked Catherine if she had anything to ask for herself, she replied that she would be quite satisfied if he would also pardon two poor old gentlemen, who had been kind to her in her exile. Her request was at once granted. Very touching was the meeting between the heroic daughter and the parents whom she had delivered. When she came into their presence, they at once fell on their knees, to thank her but she exclaimed, 'It is God that we have to thank for your wonderful deliverance.'

(c) An elephant was in the habit of passing over a small bridge leading from his master's house into a town in India. He one day refused to go over it, and it was only by cruelly goading him with a spear that he could be forced to venture on the bridge, the strength of which he first tried with his trunk, showing that he suspected something. At last he went on, but before he could get over, the bridge gave way, and both the elephant and his driver were cast into the ditch. The fall killed the driver, and very much injured the elephant.

2. Explain and expand in Nepali the ideas contained in one of the following passages :—

15

(a) कपट पश्यन्तु त्याग भैक्ष्यो ।  
द्रुमपत्रं तिमि लेख उज्जालो ॥

(b) जानु पर्छ सबले उर बाटो ।  
गर्ने व्यर्थ किन यो अनि फाटो ॥

3. Either, Give a short estimate of the character of Lakshman and Bharat from the *Rāmāyana*.

15

Or, Describe briefly in Nepali the progress of Hindu civilization during the reign of Vikramaditya.

4. Either, Depict briefly in Nepali the character of Sītā as an ideal of Indian womanhood during the time of the *Rāmāyana*.

10

Or, Depict briefly in Nepali the character of Hanumān.

5. Write an essay in Nepali on any one of the following subjects :— 25

- (a) The necessity of physical exercise for a healthy body.
- (b) Your favourite animal.
- (c) The usefulness of fruit as an article of food
- (d) The evils of smoking.

### URDU.

*Paper-Setters*— { MD. TAHIR RIZWI.  
KHAN BAHADUR MD. YUSUF, M.A.

*Examiner*—KHAN SAHEB MAULVI REZA ALI WAHSHAT

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Describe briefly Sir Saiyid Ahmad's character and habits following closely the account given in your text book. 15

*Or*, Write in your own words the main principles to be followed by a student in the course of his study.

2. Give the general purport of the story of مَرغ و صیاد 16

3. Explain any two of the following in your own words :— 15

(a) گرداب پر تھا شعلہ جوالہ کا گمماں

انگارے تھے حباب تو پانی شرفشان

مونہ سے نکل پڑی تھی ہر اک موج کے زبان

تہ پر تھے سب نہنگ مگر تھی لبوں پہ جان

پانی تھا آگ گرمئی روز حساب تھی

ماہی حوسیم آب پر آئی کباب تھی

(b) جام دہان نما ہے شہنشاہ کا ضمیر

سوگند اور گواہ کی حاجت نہیں مجھے

میں کون اور ریختہ ہاں اس سے مدعا

جز انبساطِ خاطر حضرت نہیں مجھے

سہرا لکھا گیا زرہ امتثالِ امر

دیکھا کہ چارہ غیر اطاعت نہیں مجھے

(۰) آگہ آباد ترے دم سے ہے دائم دُنیا  
 اور مثل ہے کہ بامید ہے قائم دُنیا  
 آگہ ہے تیری ہوا میں داں شیدا گلشن  
 لہلہاتے ہیں تری یاد میں کیا کیا گلشن  
 ہل کے گل ن پہ ہے جھایا ہوا نیرنگ ترا  
 کون سا پہل ہے جس پر کہ نہیں رنگ ترا

4. Fill up the blanks :--

5

سمجھ صرف باتوں ہی — مُنحصر نہیں ہے بلکہ ہر قسم کے  
 کاموں — بھی متعلق ہے گویا ہماری زندگی — ہمارے تمام کاموں —  
 رہنما اور ہمارے لئے قادر مطلق خدا — نالاب ہے \*

5. Expand the idea contained in the following :--

10

مسترت ہوئی ہنس لئے در گہری  
 مصیبت پڑی رکے چپ ہو رہے  
 اسی طور تے کت دیا رور ریس  
 سلاسا شب کورے سو رہے

6. Translate the following into Urdu :--

16

Altamash had taught his daughter Raziya everything that a woman usually knows, and all that a man is taught as well. She was brought up like a prince, and knew all about the affairs of government, and could write and read well. She could ride on horseback and use a bow or sword as well as any of her brothers. While she was still young, Altamash had to leave Delhi with a great army to fight against the Rajputs in the South. He chose his daughter to rule in his stead, while he should be away.

7. (a) Give genders of the following :--

4

رحمت - شربت - جفا - خطا - رچی - دھی - ستم - کرم

(b) Use any three of the following in sentences :--

6

عقل گم ہونا - آگ ہو جانا - پانی پانی ہو جانا - دم بھرنا

8. Write an essay in Urdu on one of the following subjects :--

20

(a) Town life :--Outlines --Its various advantages :--(i) educational help; (ii) medical help; (iii) society. Disadvantages :--(i)

want of fresh air; (ii) temptations; (iii) annoying noises. Comparison with village life.

(b) Friendship :—Headings—(i) its definition, (ii) its use and advantages; (iii) the friendship of the wicked and the virtuous; (iv) true and firm friendship rare; (v) conclusion.

(c) A railway journey or visit to a place of interest.

### MANIPURI COMPOSITION.

*Paper-Setters*— { MR. SANJIBAN NADIA SINGH.  
MR. SANJIBAN NADIA SINGH.

*Examiner*—MR. RAJKUMAR SETHU SINGH, B.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either, (a)* Show by examples from your text books that **১**  
**↑কপিতা** or forgiveness is the best instrument to subdue the wicked with.

*Or, (b)* Explain that Manthara worked like an evil spirit upon the innocent mind of Kaikeyī. **5**

2. *Either, (a)* Give explanatory notes on the evils of **10**

**তাখীৰা অমন্তং মীগী মতুংদা ঙাংনবা ।**

*Or, (b)* Write a critical note on the great deeds of Bhagya **10**  
Chandra.

3. *Either, (a)* Compare the old beliefs and traditions with the **10**  
truths discovered by scientific researches of modern times regarding the innermost parts of the earth.

*Or, (b)* Give a critical account of the competition between **10**  
'Khamba' and 'Nongban' for the hand of 'Thoibi' and add a moral.

4. Explain any *three* of the following extracts with reference **5+5**  
to the context :— **+5**

(a) **তৌইগুধম্মং অমন্তা মী পূমনমকী অপাষা মারুতবম্ম  
খাইমককী অপাষা অমন্তং পুমা হাঙ্গিবম্ম থোইনা লুবা নন্তে ।—মশাগী  
হুঙাইবা ।**

(b) **ধনঞ্জয়—মহারজ ! তেংবানবা হাঙ্গিবা অসি ঈশ্বরগী ধবককী  
লৌইশংগুধনি । মহোশাগী করবা পোংনা করবা মতমদা ধবক ধাদোক্তুনা  
লৈবা উবগে ?**

(c) **বভ্রবাহননা মাজি পাকলে, ময়োল অহম উমলবা অৰ্জুন্নী  
কোক বনিপুৰদা তারে । মাসিদা গঙ্গাগী শাপ থুংলে ।**

(d) **মযানা মচা পূমনমক কোহুনা হাঙ্গিবকই 'নখোইগী মরকতা  
অহানবা পাৰা ওবা মীনা লাইরিক অসি কংগনি ।'**

5. Amplify the following :—

**চেকশিল্পগা চেকী যুম শাই,  
ফাদোকলগা করা শাই ।**

6. Translate any *one* of the following into Manipuri :— 15

(a) Now this obedient and dutiful daughter never forgot her mother's last request, but each morning and evening took the mirror from its hiding place, and looked in it long and earnestly. There she saw the bright and smiling vision of her lost mother. Not pale and sickly as in her last days, but the beautiful young mother of long ago.

(b) The king turned to the wise men of his court and asked them what the dream meant. No one could say. At last a good old *fakir*, who had given away all his worldly goods and lived on alms, replied, 'He is still in great grief because his vast wealth has passed to others, and his eyes still long to look at it.'

7. Combine the following short sentences into one sentence :— 5

শকুন্তলা রাজসভাদা চংলকলে। পাত্ৰমিত্ৰ অঙম অথৌ পুন্নমকনা  
পুন্নকোই কোইনা ফমই। ছন্নস্ত মহারাজনা সিংহাসনা ফমই। মাহ  
শকুন্তলানা উরে। ছন্নস্ত মহারাজবু ভক্তিগা লোইননা খুন্নমই।

8. Construct *five* short sentences illustrating the use of *five* of the following words :— 5

(a) গোচোন, (b) খেকনা, (c) উশোয়, (d) নিংথোফী,  
(e) লুংবং, (f) তেংনৌবল, (g) চংনিংলৈমা।

9. Write an essay on any *one* of the following :—

(a) Travelling: its object—the delights of visiting strange lands—some great travellers of olden times—modern modes of travelling—increase of knowledge—removal of prejudices. 20

(b) Thrift: importance of the habit of saving—always possible to save something whatever our means—gradual growth of the habit—provision for old age—preparing for the rainy days. 20

## GARO.

*Examiner and Paper-Setter*—MR. F. W. HARDING, B.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Answer in Garo four only of the following questions :— 40

(a) Narrate briefly the story of Ruth.

(b) Describe the character of Ruth and illustrate your statements by incidents from her life.

(c) Who or what were the following :—Zion, Elimelech, Moab, Boaz, Robert Bruce, Jerusalem, Hyacinth?

(d) Tell the story of the mouse that saved the life of the lion.

(e) Who was Isaiah? Where did he live? Concerning what peoples did he utter prophecies, and in general what great message did he utter in Isaiah 40—55?

2. Give a brief summary in Garo of the following passage :— 15

Jihovako manna am.mitingo, nasimang uko am.bo; uni sepango dongpition nasimang uo bibo; ekanggipa antangni reaniko, aro kakketgijako mande antangni ohauchiarangko watgalchina; aro ua

Jihvaona pilbachina, aro ua una kasachakgen; aro anchingni Isolona, maina uan bangbee kema kagen. Maina angni chanchiarang nasi-mangni chanchiarang ongja, aro nasiuangni reanirang angni reanirang ongja ine Jihova agana. Maina aana bate salgirang chubata gita, nasiuangni reanirangna bate angni reanirang, aro nasiuangni chanchiarangna bate angni chanchiarang chubata. Maina mikka aro suuri gaakgipaba salgioni ongone uchina pilanggija aako chi rudapa, aro uko bimik aro manchokako naata, aro satgipana bitchriko aro chagipana chaaniko ona gita, angni kusikoni onkatgipa angni kata onggen; ua ongramari angona pilbajawa, indiba angni namnikako chusokatgen, aro anga jena uko watataha, uano ua silgen.

3. Translate into Garo the following :—

15

Once upon a time a discussion arose between the sun and a cloud as to which was the stronger. The cloud said, 'Keep quiet. You are merely a stove, you seek to become equal to me. You have no right to speak so proudly. I cause the wind to blow, and the fearful lightning and the thunder. Because of my anger the rivers and the seas are restless.'

The sun replied, 'You have talked enough. A hollow vessel makes the greatest noise.'

'What good are mere words?' replied the cloud. 'Let us prove our strength. Under yonder tree sits a traveller. Come, let us prove by deeds our power over that man. Then shall we see whose power is the greater.'

So the cloud began to show his strength. It began to rain and hail. The traveller arose and resumed his journey. He wrapped his cloth about himself, put up his umbrella and tried to protect himself from the rain and hail. The storm, however, was so fierce that he was soaked through, the sleet blinded his eyes. Seeing this the cloud laughed within his heart.

Then the sun began to shine. The cloud rolled away and soon disappeared entirely. The sun shone over everything. The rain ceased, the hail stopped. On account of the heat the traveller threw off his cloth. Then the cloud realized that the sun was the more powerful of the two.

4. Answer in Garo four only of the following : -

16

(a) How is the comparative and superlative degree of adjectives expressed in Garo? Illustrate.

(b) Explain the difference in meaning of the suffixes *-mang*, *-rang* and *-drang* in the words *jnotmang*, *jnotrang*, and *jnotdrang*.

(c) Indicate the difference in meaning of the first person plural of the personal pronoun *chinga* and *anchinga*.

(d) Explain the forms *dak-ani*, *dak-gipa*, and *dak-gimin*.

(e) In the sentence 'Ua manchokako naata' explain the use of the inserted particle *-at* in the word *naata*.

5. Write an essay in Garo of 200 to 300 words on either of the following subjects :—

14

(a) The most interesting experience in my life.

(b) The value of the bamboo to the Garo.

TELUGU.

Paper-Setters— { PROF. S. RADHAKRISHNAN, M.A., D.LITT.  
MR. R. C. RAU, M.A.

Examiner—MR. R. C. RAU, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. సత్యహరిశ్చంద్రుని కథ విశదముగా వ్రాయుడు. 20

విశ్వామిత్రుడు, లోహితాశ్వుడు, చంద్రమతి, వీరబాహుడు, గురించి మీకేమి తెలియునో వ్రాయుకు.

2. “చ్యావనుడు” అను గ్రంథము చదువుట వలన మీ గ్రంథకర్త 20  
రామకృష్ణ శాస్త్రిగారి ముఖ్యమైన పుణ్యములెవ్వయో గ్రహించి  
వ్రాయుడు.

3. Translate the following passage into Telugu — 20

It is of the greatest importance that regularity should be observed in the management of infants. The routine of the day should proceed like clockwork. The result will be that gradually the child will acquire habits of regularity. Its meals and bath must be given exactly the same time every morning and evening. It should be put on its chair at the same time every morning and evening. It is possible to train a child to use its chair at regular intervals at a very early age, and the inculcation of regularity in this respect has an important bearing upon its after health and well-being. By the time it is nine or ten months old it will, if properly trained, in all ordinary cases have learned to wait to be put on its chair and not wet its diapers.

4. Explain and use the following Telugu phrases in sentences of your own :— 15

- (a) చుట్టపై చూడ వచ్చి దయ్యమై పట్టుకొన్నట్లు.
- (b) ఊరువానికి గాటి భయము : పొరుగుూరు వానికినీటి భయము.
- (c) దిక్కులేని వానికి దైవమే దిక్కు.
- (d) చికిరిసవాడు సెగ్గెలుగడు.
- (e) ఈ దినము హరివాసరమే.

5. Write an essay in Telugu on—“ దీపావళి.” 25



## LUSHAI.

*Paper-Setter and Examiner—REV. E. L. MENDUS, B.A.*

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions to be answered in Lushai.*

*Zawhna zawng zawng Zoṭawnga chhan' tur ani.*

*The figures in the margin indicate full marks.*

*Pilgrim's Progress.*

1. Give a description of any one character in the *Pilgrim's Progress*. 20  
Kristian Van Ram Kawng Zawh thu a mi pakhat chanchin ziaak rawh.
2. Say what you know of Bunyan. 20  
Bunyana chanchin i hriat apiang ziaak rawh.
3. Explain and illustrate the popularity and value of this book. 20  
He mi lekhabu hi a lârzia leh a hlutzia hrilfiah la entir rawh.
4. Write an account of Christian's conflict with Satan. 20  
Kristian leh Setana nena an inbei thu ziaak rawh.
5. Either, Give the meaning and context of the following words :— 20  
(a) A man that flattereth his neighbour, spreadeth a net for his feet.  
(b) Then Christian gave three leaps for joy.  
Or, Write an account of Vanity Fair.  
Emaw, Heng thu hi a awmzia leh a vel a thu te chu ziaak ang che :—  
(a) Mi a vêngte faktu chuan a ke atân lên a zâr.  
(b) Chutichuan Kristiana chu a lawm avangin wawi thum a zuanga.  
Emaw, Lawilodawrpui chanchin ziaak rah.

## MODERN TIBETAN.

*Paper-Setters—* { MR. KARMA SAMDON PAUL.  
,, SATKARI MUKHERJEE, M.A.

*Examiner—MR. SATKARI MUKHERJEE, M.A.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any two of the following passages into modern Tibetan :— 40  
(a) The crown and glory of life is character. It is the noblest possession of a man, constituting a rank in itself, and an estate in the general good will; dignifying every station, and exalting every position in society. Though a man have comparatively little culture, slender abilities, and but small wealth, yet if his character be of

sterling worth, he will always command an influence, whether it be in the workshop, the counting house, the mart, or the senate. Canning wisely wrote in 1801, 'My road must be through character to power; I will try no other course, etc.'

That character is power, is true in a much higher sense than that knowledge is power. Mind without heart, intelligence without conduct, cleverness without goodness, are powers in their way, but they may be powers only for mischief.

(b) The books tell us that already at the birth of Prince Siddhattha the Brahmins who lived as priests and astrologers at the court of the King Suddhodana predicted the child's high destiny. They prophesied: If Prince Siddhattha mounts the throne, he will become a king of kings, a world-ruler; but if he renounces the throne and chooses the life of a recluse, he will become a world-subduer, a universal Buddha. 'And the hermit, Kaladevala, hastened from the wilderness of the Himalaya, threw himself at the feet of the child, and said: "Verily, this child will one day become perfect, a supreme Buddha, and will show unto men the way to emancipation."'

(c) Kāṇva turned his steps the same way and reached a wide, warm, forest-glade encircled by majestic trees. And lo! a sight most wonderful met his eyes. In the middle of the glade, beneath a canopy of white bush-blossoms, there lay, on a coverlet of dark purple silk, a baby girl, radiant and beautiful, her little limbs half covered with a scart of finest muslin. Close by her side, a deer, half-kneeling, offered her teats, whereat the stranger child clutched with her little hands and drank eagerly. And as she drank, a young fawn waited patiently by her mother's side, while that human stranger deprived her of the nourishment which was her right.

2. Explain the following extract in modern Tibetan.

15

*Either, (a)* གཉིན་སདུན་རྒྱུ་སྤྱོད་པ་ལྟར་མེས་འབྲུལ་ཞིང་འཁྲུང་བ་  
གཟིགས་པས། འཁོར་བ་སྤྱིང་པོ་མེད་པ་ལས་གྱི་རང་བཞིན་དང་འབྲུགས་དེ། རྒྱུ་སྤྱོད་པ་  
དུགས་གྱི་གནས་སྤྱོད་ཞིང་། ལུས་ནི་ཤིང་དང་རྩ་བ་དང་འདྲའོ།

*Or, (b)* ཕྱག་སྤྱོད་འཁོར་ལོས་བསྐྱར་བའི་རྒྱལ་པོ་སྤྱོད་།  
སྤྱན་སྤྱོད་བསྐྱལ་བ་བཟང་པོ་འི་སངས་རྒྱུ་སྤྱོད་།  
གང་ལ་གང་འདྲུལ་དེ་ལ་དེར་སྤྱོད་པས།  
བཅུན་པ་སྤྱན་རས་གཟིགས་ལ་ཕྱག་འཚལ་ལོ།།

3. Correct the following:—

5

ཐོང་འབྲུར་ཆེན་པོ་གྱུ་འཁྲི་གཉིས་གཏོང་དང་། འབྲུལ་འཕྱན་དུག་བཅ་སྤོན་བོ་  
སྤྱན་སྤྱོད་ཡོད།

4. What do you understand by the following? Explain in your own language (modern Tibetan). 15

(a) ར་ས་ལེ་རིང་ན་གད་པོ་དེ་ཚུལ། མི་ཐོ་བྱ་རིང་ན་སྐྱགས་པའི་ཚུལ།

(b) གཏོར་ས་ལ་དཀར་གྱུན་བྱང་བ། མར་གྱི་སྐྱ་རིན་ཡིན།

5. Write an essay in modern Tibetan on any of the following :— 25
- All that glitters is not gold.
  - Where there is a will, there is a way.
  - Kindness to animals.

MODERN ARMENIAN.

**Paper-Setters—** { MR. M. J. SETH, M.R.A.S.  
                              ,, S. MIHIJEAN.

*Examiner*—MR. M. J. SETH, M.R.A.S.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Write in Modern Armenian the answers of the following 40 questions.

Եւ Ռուսիո չից ախայայցոյն Գրոյցիքս. մ. Կարսի/Ն. Կ. Եւ Եւրոպայի թշ.

(11) Ծուր իւրախու, իւրի իրկիրից: Զ զաւթս իւր առեւիր:

« Երեւոյ տրակտատիւն խաղաղեալ որ աչիք իրանաւ-իւր»

*Handwritten signature:* J. H. P. ...

14) ԲՐԻՏԱՆԻԱՅԻՆ ԳԵՐԻՆԱՆԻՆԻ ԿԵՆՏՐՈՆԱԿԱՆ ԲԱՐՔՈՒՄԸ:

« Ի՞նչ է ինչ Կոմիտեի. այնպիսի Գրգռե՛ր. Արեւ. Դու Կոմիտեի Կոմիտե:

*(Handwritten signature)*

(7) Եւ ինչ որ Կրօնականութիւնը բարոյական էր չէր նշանակուիլ ինչ որ Կրօնականութիւնը Կրօնականութիւնն էր:

vi) By reference to the ...

[illegible]

71 1774-1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2

to the 1st of July 1864.

1. Einleitung in Methoden Mathematik

2. It is no true contentment - whatever be his station in life -

"I possess and cherish the gentle powers, who is patiently  
 sought out, who treats others respectfully, who is sympathetic  
 with the sorrowful and the suffering, who does all as  
 he would be done by. Can he ever prosper? Can  
 another be the need rate, and it is also the way  
 of good breeding —

3. Fravlat uti t. g. l. l.

*16. In your judgment, if you are asked to testify at trial, will you be able to do so?*

*[Faint handwritten notes at the bottom of the page]*

Stange in trocken Sommer

ՀԱՅԿԱՆԻ ՄԱՐԶԻ ԱՎԱՅԻՔԻ ՀԱՊԱՏԱԳՈՒՄԸ

Write on any Dutchman's name on any one of the following subjects:

[illegible]

ἡ ὁμοθυμαδὸν ἐκείνη ἀποφασιστικὴ καὶ ἀνεπισημοφανής.

[illegible]

## GUJRATHI.

*Paper-Setters*— { DR. I. J. S. TARAPOREWALA, B.A., PH.D.  
PANDIT HARGOBIND DAS SETH.

*Examiner*—PANDIT HARGOBIND DAS SETH.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks*

(સવાલો ના જવાબ ગુજરાતીમાં લખવા.)

1. નીચે આપેલા વિષયો પૈકી એક પર એક નિબંધ લખો : 20  
 (ક) બાગ બગીચા.  
 (ખ) પુસ્તકોનો સદુપયોગ.  
 (ગ) વર્ષા ઋતુ.
2. નીચે લખેલા અંગ્રેજી ફૂકરાનો ગુજરાતીમાં અનુવાદ કરો : 20

When travelling in Kashmir Akbar met an Armenian merchant of the name of Jacob, who had his son with him, a handsome and promising lad. Akbar invited this Armenian merchant to come and settle at Agra and also to induce his other friends from Armenia to come and settle down in the imperial city. Akbar promised to give them land on which they could build their church and worship God in their own way. For Akbar knew that the Armenians were a religious people and that they were so deeply attached to Christianity that they would never consent to settle in a city where they could not have a church. Soon the invitation of the emperor had its desired effect and at the wish of the emperor himself a church was erected at Agra in the year 1562.

3. નીચે લખેલાંનો અર્થ સ્પષ્ટ સમજાવો :

10

- (ક) શૂળીનું વિદ્ર કાંટે ગયું.
- (ખ) તેજને ટુકારોને ગધેડાંને ડીકાં.
- (ગ) અંધારી રાતે મગ કાળા.
- (ઘ) ઘોઘીનો કુતરો, ન ઘેરનો ન ઘાટનો.
- (ઙ) વાલે તેલું પામે.

4. નીચે લખેલા દૂકરાનો સંક્ષિપ્ત સાર ગૂજરાતીમાં લખો :

15

જહાનપણ્થી માળાપની આજ્ઞામાં રદી, ગુર ઉપર ભક્તિ રાખી વિદ્યા ભણવી. કારણકે વિદ્યા એ જ માણસની પશુતા ટાળી આ એક અને પર-લોકમાં એનું કલ્યાણ કરનાર દિવ્યશક્તિ છે, પણ વિદ્યા નીતિ વિના નકામી છે. માટે સર્વ નીતિનો પાયો જે સત્ય તે ગુણ જહાનપણ્થી જ આપણું મન, વાણી અને કચમાં જમાવી દેવો. તે સાથે જહાનપણ્થીજ શરીર સાફ તંદુરસ્ત, મજબૂત અને સહનથીયે થાય ચવી ટેવ પાડવી. આમ મન અને તનની કેળવણી પ્રાપ્ત કરીને મ્હોટપણે ઉદ્યમ, અકલ, પરાક્રમ અને પ્રામાણિક પણાથી ધન પ્રાપ્ત કરવું, અને તેનો ઉદ્ધારણ્થી સૌનું કલ્યાણ થાય તેવે માર્ગે ઉપયોગ કરવો.

5. નીચેની વાર્તાઓ પૈકી એકને તમારા પોતાના શબ્દોમાં લખો અને 10 તેનો સારાંસ આપો :

- (ક) બીલકુમાર અકલત્ય.
- (ખ) શેઠ અને મોચી.
- (ગ) રત્નિદેવ.

6. નીચ ઉતારેલી કરીઓનો અર્થ લખો અને તે તમારા પાઠ્યપુસ્તકમાં 15 કચ સ્થળે આવેલ છે તે જણાવો :

(ક) છુપિ રહ્યા છે દોતિયા બે રૂડા, તેને તું નવ જાણે  
જેમે કચ કરોછો પ્રતિદિન, તે લખી લેએ ટાણે.

(ખ) વાડ થઈને ચીભડાં ગળે, સોંછી વસ્તુ ક્યાંથી મળે ?  
ખજું ખાતું હોય બે અન્ન, તો જીવે નહિ એકે જન.

(ગ) સકરખોરનું સાકર જીવન, ખરના પ્રાણ જહરે,  
ક્ષારસિંધુનું માછલુંડું જ્યમ, મીઠા જવમાં મરે.

7. નીચેના શબ્દોનો અર્થ લખો અને ચ પ્રત્યેક શબ્દને તમારા પોતાના 10 જુદા જુદા વાક્યોમાં વાપરી બતાવો :

અંધાધુધી, ભરણપોલણ, ચણભૂમિ, મિત્રવત્સલ, શરણાગત.

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## TAMIL

*Paper-Setter and Examiner*—RAO BAHADUR L. K.  
ANANTHAKRISHNA IYER, B.A., L.T.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Give in plain Tamil the meaning of the following verses :— 20

- (a) புறநட்டகம் வேர்ப்பார் நசுப்பகைமை  
வெளியிட்டு வேளுதல் வேண்டுங் கழிபெருங்  
கண்ணோட்டஞ் செய்யேல் கருவியிட்டா ற்றுவார்  
புணவைத்துமுடார் பொதிந்து.
- (b) சிறுமுயற்சி செய்தாங் குறுபயன் கொன்னப்  
பெறுமேனின்றாழ்வரோ தாழார் அறன்ல்ல  
எண்மைய வாயினுங் கைவிட்டரிதெ னின்னும்  
ஒண்மையிற் றீர்க் தொழுகலார்.
- (c) தம்மின் மெலியார் சிறியாரிடைப்பட்ட  
அம்மா பெரிதென் றகமகிழ்க—தம்மின்னும்  
கற்றாரை நோக்கிக் கருத்தழிக் கற்றவெல்லாம்  
ஏற்றே யிவர்களுநாம் என்று.

2. Express in short Tamil sentences the ideas contained 20  
in the following verses :—

- (a) அடக்கம் அமரருள் உய்க்கும் அடங்காமை  
ஆர் இருள் உய்தது விடும்.
- (b) அகழ்வாரைத் தாரும் நிலம்போலத் தம்மை  
இகழ்வார்ப் பொறுத்தல் தலெ.
- (c) சிறியோர் செய்த சிறுபிழை யெல்லாம்  
பெரியோ.ராயிற் பொறுப்பது கடனே.

3. “ஸர் ஐஸக் ஸியூட்டன்” இந்த மகாநுடைய ஜீவசரித்திரத் 20  
தை சுருக்கமாயி எழுதுக.

4. Translate the following passages into Tamil :— 20

(a) One of the girls went home on her vacation. She obtained a railway pass to Khandva. The pass allowed her to take a servant with her as far as Khandva. I was glad to obtain her permission to accompany her. I was born in year 1870 in the little village of Devrukh in the Ratnagiri district. The district lies in the Southern Konkan, which is the land south of Bombay.



(b) My father owned the house in which we lived. He cultivated a few acres of land and occupied himself with petty trading. Our little house was built with a thatched roof, and its walls of reeds plastered with mud, a little verandah and a small garden in front.

4. Write a short essay in Tamil on *one* of the following subjects :— 20

(a) பூமிகற்பிக்கும் நீதிகள்.

(b) ஏறம்பு.

(c) மனோன்மணி.

## MALAYALAM

*Paper-Setter and Examiner*—RAO BAHADUR L. K. ANANTHA-KRISHNA IYER, B.A., L.T.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. (a) കൃഷ്ണഗാഥ, ഭാരതം, കാൽപിയാജ്ജനവി 10  
ജയം, അദ്ധ്യാത്മരാമായണം ഇവയുടെ ഗ്രന്ഥകർത്താക്കന്മാർ ആരാകുന്നു.

(b) ഗ്രന്ഥകർത്താക്കന്മാരിൽ രണ്ടാളുകളുടെ ജീവചരിത്രവും അവരുടെ പ്രധാന കവിതകളും എഴുതുക. 10

(c) നാട്ടെഴുത്തശ്ശന്മാരെ പറ്റി അറിയുന്നത എഴുതുക. 10

(d) പുരാതനകേരളത്തിലെ അജ്ഞത പറ്റി അറിയുന്നത എഴുതുക. 10

2. താഴെ എഴുതിയ പദ്യങ്ങളെ മലയാളത്തിൽ എഴുതുക :— 15

(a) ഓടിടിനാരജനെ വിമിത്രോദം  
ചാടിടിനാരജ്ഞിത ചാരഹാസം  
പാടിടിനാർത്രുതനാദമപ്പൊ  
താടിടിനാർ നാടകമീശപരന്മാർ.

- (b) ഇനിത്താനിങ്ങനെ ഗുണവും നാണവും  
മാനവും കെട്ടിരുന്നപ്പോൾ  
ഭഗവാനെത്തന്നെ തപസ്സുചെയ്യുമെ  
ന്നകമെ കല്പിച്ചാളര ശംഭോ !
- (c) കാലികൾ മേപ്പാനായി കാനനം പൂകിന  
ബാലകന്മാരെല്ലാ മന്നൊരു നാൾ  
ആതപമേററുള്ള താപകൊണ്ടേററവും  
ദാഹിച്ചുചെന്നുടൻ കാളിന്ദിയിൽ.
- (d) എന്തിനു പലവിധ മുര ചെയ്യുന്നു  
പാശ്ചാത്യരെ പരാക്രമപുഷ്പികൾ  
ചിന്തിച്ചാൽ അവസാനപുരിപ്പ  
നിന്തിരുപടിയറിയാത്തതുമല്ല.

3. താഴെ ഏഴുതീയ പദങ്ങളുടെ സമാസവും അർത്ഥവും എഴുതുക :—

- (a) കാർമുകിൽവർണ്ണൻ, (b) അല്പിത്താർമാതു,  
(c) പുത്രഭേദാലിംഗനം, (d) നൃപതിശിഖാമണി,  
(e) ദുഃഗയാപിപശൻ, (f) സാരമേയങ്ങൾ.

4. Translate into Malayalam the following passage :—

15

If you have any garden at all at home, it can be turned to good account, no matter how small it is, and something can be made of it with no cost at all, but a little trouble on your part. To make a garden profitable, you must work in it yourself, not pay some one else to do so. No matter how neglected and tiny a patch of garden you have, something can be done with it, if care and time are given to it.

5. Write a letter in Malayalam to your father or guardian (a) about the choice of profession, (b) about the journey to Calcutta from your native place.

15

6. Write in Malayalam about the story of—

10

*either*

“നിരയിൽ കിട്ടിയ നിധി”

*or*

ശകുന്തളയുടെ രാജമന്ദിര പ്രാപ്തി.

7. Write in plain Malayalam the substance of the 10 following verse:—

എന്തോ നവീന മതി മാനുഷ ശക്തി ലോക  
സന്തോഷ ഹേതുക മുദിപ്പതു കാണുവാനായി  
വൻ തോയ രാശിയിലെഴുംതിരമാല തന്മിൽ  
തൻതോഴിമാൻ വടിവാലാടി രസിച്ചുവന്നു.

SINHALESE.

*Paper-Setter*—REV. SAUGATA SUGATAKANTI.

*Examiner*—REV. SEELANANDA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate the following into Sinhalese :—

25

(a) ‘Is the Brahmin in your house?’ they asked. ‘No,’ replied the king. ‘Did you give him money for his lodging?’ ‘I did not,’ again answered the king. ‘Then where shall we find him?’ asked the generals.

(a) ‘A loving son who gladly gives  
His life to do his duty,  
Will live in blissful happiness  
In realms of endless beauty.’

(c) Then he went by a short cut to the top of the mountain to which he had directed the men. There he stopped a while and looked over the world. Then he said, ‘May not the result of the deed I shall now perform give me any happiness, either in heaven, or in a future life on earth. But if there be any merit in this act of giving up the body to feed these starving people, may it help me to become the Buddha so that I may help others.’

2. Write an essay ‘on either Kusajātaka Kāvya, or Selajihipi Sandesa. 25

3. Explain the Brahmārāḍhanaya according to Pūjāvaliya. 25

4. Write a short note on the following :— 25

සමනോල, විශිෂ്ട, ජයවත්තපුරය, කැලැණිය,  
මස්කෙලිය, දෙවිලියෝ, පැරකුමිබා, නොටගමුවේ රාහු  
ලමාහිත්තානෝ, සැලළිහිණි.

## KANARESE.

*Paper-Setter and Examiner—MR. P. APPAJI RAO, B.Sc.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any two of the following passages into Kanarese :— 15

(a) The rose is a lovely flower. There are other flowers that smell as sweet, but they are not so beautiful. There are other flowers that are as beautiful but they do not smell so sweet. There is no flower in the world that is both so beautiful and so sweet as the rose. In most parts of the world the rose grows wild. But wild roses are not so large nor so beautiful, nor do they smell so sweet as the garden rose. In every garden in England this sweet flower may be seen, and without it no garden would be perfect. There are hundreds of varieties, some large, some small. They are of different colours : some white, some red, some yellow. There is a colour that is known as rose colour. It is the pink tint seen in the cheeks of children who live in cold countries, and is a sign of health.

(b) I will tell you, gentlemen, what has been the practical error of the last twenty-five years—not to load the memory of the student with a mass of undigested knowledge, but to force upon him so much that he has rejected all. It has been the error of distracting and enfeebling the mind by an unmeaning profusion of subjects; of implying that a smattering in a dozen branches of study is not shallowness, which it really is, but enlargement, which it is not, of considering an acquaintance with the learned names of things and persons, and attending on eloquent lecturers and membership with scientific institutions and the sight of the experiments of a platform, and the specimens of a museum, that all this was not dissipation of mind, but progress. All things now are to be learned at once, not first one thing, then another, not one well, but many badly. Learning is to be without exertion, without attention, without toil; without grounding, without advance, without finishing.

(c) When you wake, say to yourself—To-day I shall encounter meddling, ingratitude, violence, cunning, jealousy, self-seeking, all of them the result of men not knowing what is good and what is evil. But seeing that I have beheld the nature and nobility of good, and the nature and meanness of evil, and the nature of the sinner, who is my brother, participating not indeed in the same flesh and blood, but in the same mind and partnership of the Divine. I cannot be injured by any of them; for no man can involve me in what demeans. Neither can I be angry with my brother or quarrel with him, for we are made for co-operation like the hands, the feet, the eyelids, the upper and lower rows of teeth. To thwart one another is contrary to nature; and one form of thwarting is resentment and estrangement. You are a part of the social whole; a factor necessary to complete the sum; therefore your every action should help to complete the social life.

2. Write an essay on any one of the following subjects in Kanarese :- 20

(a) ಬುದ್ಧಿ ವಂತನೇ ಬಲಿಷ್ಠನು

(b) The life of a peasant in Karnāṭaka Desh.

(c) Advertisements—their use and abuse.

3. Expand the following proverbs into a small story in 20 Kanarese not exceeding one and a half pages :—

(a) Men may come and men may go  
But I go on for ever.

(b) ಅಳಿಗೆ ಅಳು ಭಾರ.

4. Describe briefly the conversation of Savitri with Yama. 15  
5. What do you understand by *Bhratri-prema*? How far does your view agree with that of the writer of this book? 15  
6. Which part of *Saivali* do you like best? State your reasons. 15

## PERSIAN VERNACULAR

*Paper-Setter*—AGA MD. KAZIM SHIRAZI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. (a) Translate into English :—

10

یکی از ملوک مدت عمرش سپری شد و قائم مقامی نداشت  
وصیت کرد که بامدادان نخستین کسی که در شهر در آید تاج شاهی بر  
سر او نهید و تفویض مملکت بدو کنید - اتفاقاً اول کسی که در شهر  
در آمد گدائی بود که همه عمر لقمه اندوخته و رقعہ بر رقعہ دوخته -  
ارکان دولت وصیت ملک را بجا آوردند و ملک و خزائن بدو ارزانی  
داشتند \*

(b) Give in your own words the substance of the whole story of which the above is an extract. 6

2. Give the summary of the following lines either in Persian or in English :— 12

شنیدم که در وقت نزع روان \* بهرمز چنین گفت نوشیروان  
که خاطر نگهدار درویش باش \* نه در بند آسایش خویش باش  
نآید بنزدیک دانا پسند \* شبان خفته و گرگ در گوسپند

برو پاس درویش محتاج دار \* که شاه از رعیت بود تاجدار  
رعیت چو بیخ اندر سلطان درخت \* درخت ای پسر باشد از بیخ سخت

3. Answer any *two* of the following :—

16

(a) Give the opposite numbers of the following :—

ملوک - ارکان - رعیت - ملائکه - رقت - وصیت - عمر - مملکت \*

(b) Form sentences from each of the following :—

ترک گفت - خانه بدرش - زمین ریخت - زمین زد - دراز کشید -

در رسید - بر خورد - نا گفته \*

(c) Give the Persian equivalents of—be quick; walk slowly; drink water; don't talk; he should go; it rains.

4. Write a short account of the life of Sa'di or Jāmi.

8

5. Explain and turn into prose order :—

8

مرا خود دل دردمند است خیز \* تو نیزم نمک بر جراحت مریز

6. Translate into Persian :—

25

The two friends knocked at the door of my house, and my porter opened it. One of them said to the man, 'We are informed that this is Hasan's house; tell us if we are not mistaken.' 'You are quite right, Sir!', said the porter, opening the door wide, 'this house belongs to him. Pray come in, my master is in the house, and any of the slaves will point him out to you.' Saying this he showed him the way. I had no sooner set my eyes on the friends, than I knew them. I rose from my seat, ran to them, and would have kissed their hands, but they would not allow me. Both of them embraced me.

7. Write an essay in Persian on *one* of the following :—

20

(a) راستی موجب رضای خداست \*

(b) کار امروز را بفردا نینداز \*

(c) سالی که نکوست از بهارش پیداست \*

## PORTUGUESE

*Paper-Setter and Examiner*—DR. P. D. BRAGANCA CUNHA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Write what you know about the author of *A cidade e as serras*. 20

2. Give in your own words the meaning of the following verses :— 20

Na batalha da vida evidente se torna.

Que ou havemos de ser martelo ou ser bigorna.

Conclusão natural do dilema singelo :  
Evitar a bigorna triste . . . e ser martelo.  
Monstruoso, feroz, horrível, mas em suma  
Ponderemos que a vida é curta, e que há so uma !

3. Write an essay in Portuguese about 'Antes pobreza honrada do que riqueza roubada.' 40
4. Give—the present indicative of the verb *fazer*; the imperfect indicative of the verb *pôr*; the perfect indicative of *vêr*; and the conditional of *trazer*. 10
5. Give the meaning of the following compound nouns :—*mestre-sala*, *goma-lacre*, *amôr-perfeito*, *meia-lua*, *pedra-iman*, *malquerença*, *papa-jantures*. 10

### ALTERNATIVE PAPER IN ENGLISH

Paper-Setters— { DR. SUNITI KUMAR CHATTERJI, M.A., D.LIT.  
                          { MR. A. K. CHANDA, M.A. (OXON.).

Examiner—MR. H. H. CHABTREE, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Write a short essay on *one* of the following subjects :— 20
  - (a) Great Men.
  - (b) Plain Living and High Thinking.
  - (c) The Study of Geography.

*Or*, Write a letter to a friend, describing *either* (a) a river journey, *or* (b) the rainy season.
2. Give the substance of *one* of the following passages, bringing out clearly the main idea :— 14
  - (a) A book is essentially not a talked thing, but a written thing; and written, not with the view of mere communication, but of permanence. It is printed because its author cannot speak to thousands of people at once; if he could, he would—the volume is mere *multiplication* of his voice. But a book is written not to *multiply* the voice merely, but to *preserve* it. The author has something to say which he perceives to be useful, or helpfully beautiful. So far as he knows, no one has yet said it; so far as he knows, no one else can say it. He is bound to say it, clearly and melodiously if he may; clearly, at all events. In the sum of his life he finds this to be the thing, or group of things, manifest to him. This the piece of true knowledge, or sight, which his share of sunshine and earth has permitted him to seize. He would fain set it down for ever, engrave it on a rock, if he could, saying, 'This is the best of me. For the rest, I ate, and drank, and slept, loved, and hated, like another. My life was as the vapour, and is not; but this I saw and knew: this, if anything of mine, is worth your memory.' This is his 'writing'; it is, in his small human way, and with whatever degree of true inspiration which is in him, his inscription, or scripture. That is a 'Book.'
  - (b) The greatest results in life are usually attained by simple means, and the exercise of ordinary qualities. The common life of



every day, with its cares, necessities, and duties, affords ample opportunity for acquiring experience of the best kind; and its most beaten paths provide the true worker with abundant scope for effort and room for self-improvement. The road of human welfare lies along the old highway of steadfast well-doing; and they who are the most persistent, and work in the truest spirit, will usually be the most successful.

Fortune has often been blamed for her blindness; but fortune is not so blind as men are. Those who look into practical life will find that fortune is usually on the side of the industrious, as the winds and waves are on the side of the best navigators. In the pursuit of even the highest branches of human inquiry, the commoner qualities are found the most useful—such as common sense, attention, application, and perseverance. Genius may not be necessary, though even genius of the highest sort does not disdain the use of these ordinary qualities. The very greatest men have been among the least believers in the power of genius, and as worldly-wise and persevering as successful men of the commoner sort. Some have even defined genius to be only 'common sense intensified.' Others have spoken of it as 'the power of making efforts' and as 'the power of lighting one's own fire,' and also as being identical with patience.

3. Choose *one* of the following passages, and give the substance of it, expressing also in a single sentence its main thought :—

14

(a) Hope on, hope ever! though to-day be dark.

The sweet sunburst may smile on thee to-morrow :

Tho' thou art lonely, there's an eye will mark

Thy loneliness, and guerdon all thy sorrow!

Tho' thou must toil 'mong cold and sordid men,

With none to echo back thy thought, or love thee,

Cheer up, poor heart! thou dost not beat in vain,

For God is over all, and heaven above thee—

Hope on, hope ever.

The iron may enter in and pierce thy soul.

But cannot kill the love within thee burning :

The tears of misery, thy bitter dole

Can never quench thy true heart's seraph yearning

For better things; nor crush thy ardour's trust

That Error from the mind shall be uprooted,

That Truths shall dawn as flowers spring from the dust,

And Love be cherisht where Hate was embruted!

Hope on, hope ever.

(b) A country life is sweet!

In moderate cold and heat

To walk in the air, how pleasant and fair,

In every field of wheat,

The fairest of flowers adorning the bowers

And every meadow's brow!

So that I say, no courtier may

Compare with them who clothe in grey

And follow the useful plough.

They rise with the morning lark

And labour till almost dark;

Then folding their sheep, they hasten to sleep;

While every pleasant park

Next morning is ringing with birds that are singing

On each green tender bough.

With what content and merriment

Their days are spent, whose minds are bent

To follow the useful plough!

4. *Either*, Expand the thought contained in *one* of the following passages, with or without reference to the poem in which it occurs :— 16

- (a) Ye fools, whose base-born thoughts invite  
To shine with tiny spurious light . . .  
Tremble lest the sun's bright glare  
Lay all your false pretensions bare.
- (b) For still, resplendent Moon! whene'er we see  
Thy placid face, and fondly gaze on thee,  
Its gentleness upon the wounded soul  
Exerts a healing power and calm control.

*Or*, Select *one* of the following quotations and write in simple English the story contained in the poem from which it is taken :—

- (a) For though the great may relish wit,  
They may not choose to furnish it,  
And jesters who have any sense  
Will seldom jest at their expense.
- (b) And thus I fling the dear-bought crown  
But whither can I fly?  
The awful thought still follows me  
That even kings will die.

5. Give in your own words the substance of *EITHER* (a) *The Revenue Officer's Story*, or (b) *The Belated Travellers*, from *A Round of Tales*. 20

6. Scan *any* two of the following passages, and discuss the figures of speech in the passages chosen by you :— 16

- (a) Can storied urn, or animated bust  
Back to its mansion call the fleeting breath?  
Can Honour's voice provoke the silent dust,  
Or Flattery soothe the dull cold ear of Death?
- (b) Where is the thatch-roofed village, the home of Arcadian  
farmers,—  
Men whose lives glided on like rivers that watered the  
woodlands?  
Waste are those pleasant farms, and the farmers for  
ever departed!  
Scattered like dust and leaves, when the mighty blasts  
of October  
Seize them, and whirl them aloft, and sprinkle them far  
o'er the ocean.
- (c) Lives of great men all remind us  
We can make our lives sublime,  
And departing leave behind us  
Footprints on the sands of Time—  
Footprints, that perhaps another  
Sailing o'er Life's solemn main  
A forlorn and ship-wrecked brother,  
Seeing, shall take heart again.

## HISTORY

*Paper-Setters*— { PROF. D. R. BHANDARKAR, M.A., PH.D.  
DR. UPENDRANATH GHOSHAL, M.A., PH.D.

*Head Examiner*—DR. UPENDRANATH GHOSHAL, M.A., PH.D.

MR. NIRMALKUMAR GUPTA, M.A.  
 „ UPENDRANATH RAY, M.A.  
 „ BIDHUBHUSHAN SENGUPTA, M.A.  
 „ ABANINATH BASU, M.A.  
 „ RAMANIRANJAN SEN, M.A.  
 „ SURENDRAKISOR CHAKRABARTI, M.A.  
 „ GOPALKINKAR MUKHERJEE, M.A.  
 „ ANILCHANDRA CHAUDHURI, M.A.  
 „ TARAKNATH MOOKERJEE, M.A.  
 ABDUL MUNIM CHOWDHURI, M.A.  
 MR. NARENDRAKRISHNA SINHA, M.A.  
 „ TARAKNATH TALUKDAR, M.A.  
 „ DEBAPRASAD GHOSH, M.A.  
 „ SUDHINDRAKRISHNA DATTA, M.A.  
 „ NAZIR AHMAD, M.A.  
 „ ANNADACHARAN SEN, M.A.

*Examiners*—

(Looked over answer-papers written in  
Vernaculars).

## BENGALI

MR. LALITMOHAN BHATTACHARYA, M.A.  
 „ MURALIDHAR BASU, M.A.  
 „ SADHANKUMAR BANERJEE, M.A.  
 SRIMATI BINAPANI GHOSH, M.A.  
 MR. BIRENDRANATH CHAKRABARTI, M.A.  
 „ NIRMALENDU DASGUPTA, M.A.  
 „ NEPALCHANDRA RAY.  
 „ TRIDIBNATH RAY.  
 „ KARUNAKINKAR BANERJEE.  
 „ PHANIBHUSHAN MUKHERJEE.

## ASSAMESE

SRIJUT SURYYAKUMAR BHUIYAN, M.A.

## PERSIAN

MR. S. KHUDA BUKHSH, M.A., B.C.L.,  
Barrister-at-Law.

## ARMENIAN

MR. M. J. SETH, M.R.A.S.

NEPALI (*Parbatia*)

MR. DHARANIDHAR MISRA, B.A.

<b>Examiners—</b> (Contd.)	{	TELUGU
		MR. B. RAMCHANDRA RAU, M.A.
	{	BURMESE
		MR. G. J. MUNRO.
	{	URIYA
		REV. B. DAS, B.A.
	{	HINDI
		PANDIT DINANATH MISRA, M.A., B.L.
	{	URDU
		MR. MUHAMMAD SHAFI
	{	MAITHILI
		KUMAR GANGANAND SINGH, M.A.
	{	MARATHI
		PROF. D. R. BHANDARKAR, M.A., PH.D.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer six questions only, at least ONE being from each group. Each question carries 16 marks. Four marks are reserved for excellence of style.*

#### GROUP A

1. Sketch briefly the career of Chandragupta Maurya, and describe the system of administration under his rule.
2. Write short accounts of the following :—
  - (a) The Palas of Bengal.
  - (b) The Pallavas of Kanchei.
  - (c) The Yadavas of Deogiri.
3. Briefly indicate the progress of Muslim arms in northern India under the Houses of Ghazni and Ghor. Sketch the parts played by Jaypal and Prithviraja Chauhan in resisting the invaders.

#### GROUP B

4. Give some account of the reign of Muhammad Tughlaq, and show how his measures led to the decline of the Empire of Delhi.
5. Sketch the rise and decline of the kingdom of Vijaynagar.
6. Give a short account of Sivaji's relations with the Mughal Empire, and describe his system of civil and military administration.

#### GROUP C

7. Summarize the measures of internal reform which are associated with the administrations of (a) Bentinck, and (b) Ripon.
8. State what you know of British relations with the Mahratta powers in the times of (a) Wellesley, and (b) Hastings (the peer).
9. Review briefly the administration of Lord Dalhousie, and explain what you think about his annexation policy.

## GROUP D

10. Describe the constitution and functions of the Indian Legislature as defined by the Government of India Act, 1919.

11. Give some account of the development of roads, railways, and irrigation in India under British rule.

12. Consider the measures taken by the British Indian Government for the improvement of public health and sanitation.

## GEOGRAPHY

*Paper-Setters*— { MR. BIRAJMOHAN MAJUMDAR, M.A., B.L.  
                          ,, HEMCHANDRA DASGUPTA, M.A., F.G.S.

*Head Examiner*—MR. HEMCHANDRA DASGUPTA, M.A., F.G.S.

*Examiners*— { MR. BENIMADHAB BHATTACHARYYA, B.A., B.T.  
                  |   ,, GANGACHARAN DASGUPTA, B.A., B.T.  
                  |   ,, SURESCHANDRA NIYOGI, B.T.  
                  |   ,, KALIKRISHNA RAKSHIT, B.T.  
                  |   ,, NIBARANCHANDRA RAYCHAUDHURI, B.T.  
                  |   ,, INDUBHUSHAN DE, B.A., B.T.  
                  |   ,, PRAPHULLAKUMAR SARKAR, M.A.  
                  |   ,, REBATIRAMAN DE, B.Sc., B.T.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Distinguish between— 10
  - (a) oceanic islands and continental islands;
  - (b) water-parting and water-shed;
  - (c) moraine and iceberg;
  - (d) tornadoes and water-spouts.
2. *Either*, Enumerate the factors on which the climate of a place depends, and indicate how the difference between the climates of Simla and Calcutta may be explained. 10  
*Or*, Explain the formation of dew and rain.
3. A telegram is dispatched at Greenwich at 1 P.M. What will be the time when it is received in Madras (longitude 80 °E.), supposing it to take 15 minutes in transmission? 10
4. Draw a map of India showing the areas chiefly noted for (a) cotton, and (b) wheat cultivation. 10
5. Name :— 10
  - (a) The chief cities of India situated on the western coast.
  - (b) The chief mountains of the Bombay Presidency.
  - (c) The chief rivers of Burma.
  - (d) The chief peaks of the Himalayas.
  - (e) The Dutch possessions in Asia.
6. Give an account of the geography of Bengal under the following heads :—(a) boundaries, (b) chief rivers, (c) chief towns and their importance, (d) chief exports, and (e) chief railway lines. 10

7. *Either*, Give an account of the following :—Bandar Abbas, 10  
Cochin, Gilgit, Jabalpur, Lucknow, Naga Hills, Palk Strait, the Ridge,  
the Sone river, and Dehra Dun.

*Or*, You are provided with a skeleton-map of Africa. Insert  
the following in this map :—Tanganyika, the Niger, the Atlas, Cairo,  
Abyssinia, Morocco, Algeria, Tunis, the Congo, and the Zambesi.

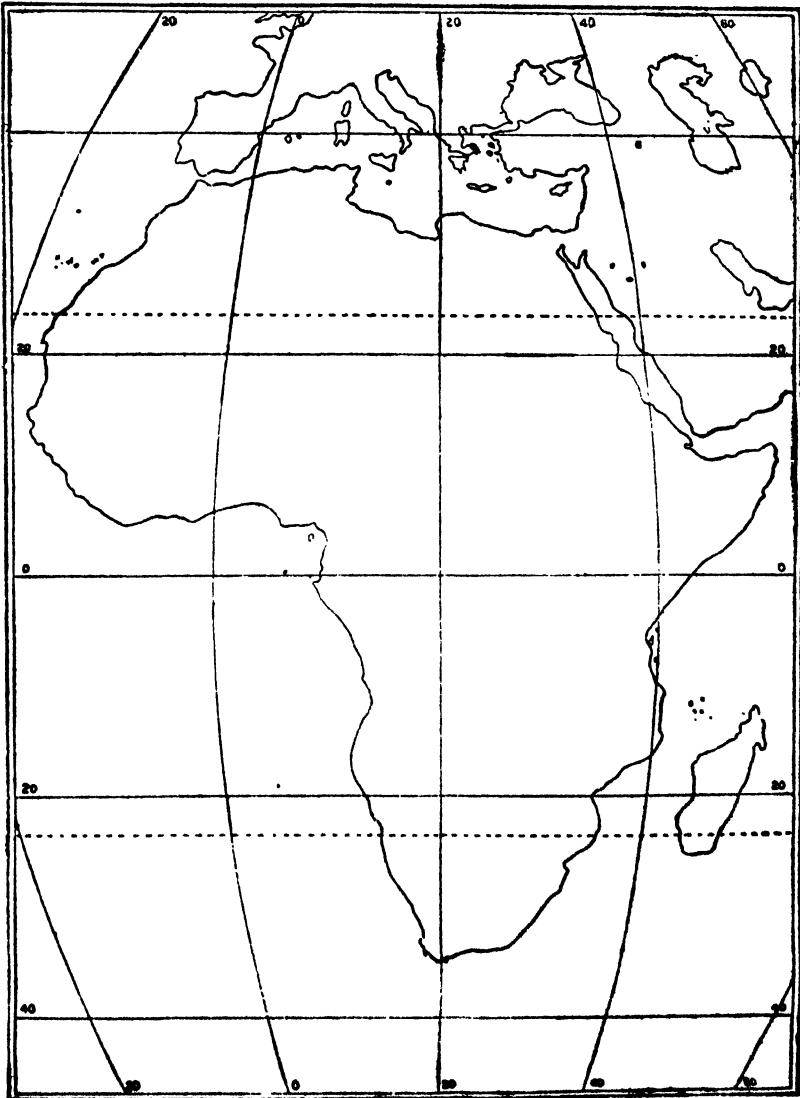
8. *Either*, Describe the coast-line of South America. 10

*Or*, Enumerate the islands composing the Japanese Empire.

9. *Either*, Name the great natural divisions of the surface of 10  
Europe, and describe them.

*Or*, Compare Italy with India so far as the surface features  
are concerned.

10. Write notes on the following :—Azores, Tropic of Cancer. 10  
Danube, Gulf of Genoa, Huron, Manchester, Nubia, Palestine, Red  
Sea, Tigris.



## MECHANICS

*Paper-Setters*— { DR. SNEHAMAY DATTA, D.Sc.  
MR. SATISCHANDRA GHOSH, M.A.

*Examiners*— { MR. KHETRAMOHAN GHOSH, B.Sc.  
„ SUDHANSUBADAN PANDA, M.Sc.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SEVEN questions.*

*The questions are of equal value.*

*Neatness will be taken into consideration in awarding marks.*

1. Define 'average velocity.'

A train starting from rest acquires a velocity of 48 miles an hour in  $2\frac{1}{2}$  minutes. Find the distance run in that time.

2. A ball is thrown up vertically and caught again in 6 seconds. Find the velocity of projection and the greatest height.

3. Enunciate Newton's Laws of Motion.

Obtain the relation between the weight of a pound mass and a poundal.

4. Enunciate 'the parallelogram of forces.'

Two forces, whose magnitudes are as 5 : 12, acting on a particle at right angles to each other, have a resultant of 78 lb. weight. Find the forces.

5. Define 'moment of a force about a point.'

A uniform beam,  $4\frac{1}{2}$  feet long, rests horizontally on two props placed under its extremities; the pressure of the beam on each prop is 5 lb. Where must a weight of 54 lb. be placed so that the whole pressure on one of the props may be 12 lb.?

6. What is an 'inclined plane?' What is its use?

How would you find experimentally the relation between the effort and the weight in the case of an inclined plane?

7. Describe the three classes of 'lever.' In which class would you place 'an oar in action.' and why?

8. Describe the single-string system of pulleys.

Find the least number of pulleys in a moveable block weighing 10 lb. in order that a weight of 120 lb. may be lifted by a downward force not exceeding 28 lb.

9. What do you understand by 'the centre of gravity of a body'?

Determine the centre of gravity of a thin uniform lamina in the form of a parallelogram.

10. The beam of a false balance is 38 inches long, and a certain body when placed in one scale appears to weigh 5 lb. 1 oz., and in the other 6 lb. 4 oz. Find the true weight of the body and the lengths of the arms of the balance.

## HYGIENE

*Paper-Setters*— { COL. A. D. STEWART.  
CAPTAIN DABIRUDDIN AHMED.

*Examiners*— { MR. RAMESCHANDRA RAY, L.M.S.  
HYGIENE IN HINDI  
MR. NALINIMOHAN SANYAL, M.A.  
HYGIENE IN TELUGU  
MR. B. RAMCHANDRA RAU, M.A.  
HYGIENE IN URIYA  
MR. PRIYARANJAN SEN, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*Any FIVE questions to be answered.*

*The figures in the margin indicate full marks.*

1. What are the chief sources of water-supply in the towns and villages of Bengal? How are wells and tanks polluted? What measures would you adopt to purify the water? 20
2. What, in your opinion, is an adequate diet for a Bengali? What classes of substances must it contain? What are the advantages and disadvantages of cooking food? 20
3. What means would you adopt to prevent the members of your family getting malaria in a village? 20
4. There is a case of consumption in a family. What measures would you adopt to prevent the other members getting infected from him? 20
5. Why are games and exercises in the open air good for making and keeping one healthy? 20
6. Give a sketch or drawing, with a short description, of what you consider a good dwelling-house for a family in a Bengal village, consisting of father, mother, and four children. 20

## COMMERCIAL GEOGRAPHY

*Paper-Setters*— { MR. MOHITKUMAR GHOSH, M.A. (CAL.), B.Com  
(LOND.).  
DR. HARISCHANDRA SINHA, PH.D.

*Examiner*—DR. HARISCHANDRA SINHA, PH.D.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer Question 1 and any FIVE of the rest.*

*The figures in the margin indicate full marks.*

1. Draw a map of India showing the chief coal-fields and the railways leading from them. 20



2. Explain as fully as you can the reason for any *three* of the following :— 16

- (a) Indian monsoons.
- (b) Different ocean currents.
- (c) Different seasons of the year.
- (d) Different climates in different parts of the world.

8. What are the necessary geographical conditions for the growth of tea, coffee, and cocoa? Name the regions (a) where all these three commodities are grown; (b) where tea and coffee are grown, but not cocoa; and (c) where tea only is grown. 16

4. State the conditions favouring the growth and the chief producing areas of—(a) rice, (b) sugar-beet, and (c) tobacco. 16

5. Explain the meaning of any *four* of the following, adding in each case where the substance is to be found :—(a) crude oil, (b) palm oil, (c) latex, (d) galena, (e) merino, and (f) spelter. 16

6. Write a short essay on 'Coal,' with a paragraph on each of the following topics :—(a) origin of coal; (b) coalmining; (c) its dangers; (d) different kinds of coal; (e) principal coal-fields of the world. 16

7. Describe fully the sea-route from any port in Britain to a port in India. 16

8. State the situation and account for the importance of any *five* of the following :—(a) Alexandria. (b) Baghdad, (c) Colombo, (d) Dundee, (e) Marseilles, (f) Montreal, and (g) Valparaiso.

## BUSINESS METHOD AND CORRESPONDENCE

*Paper-Setters*—{ Mr. S. R. BATLIBOI, F.S.A.A.  
,, NARENDRANATH SARKAR, M.A.

*Examiner*—MR. NARENDRANATH SARKAR, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*Any EIGHT out of the following twelve questions may be attempted.*

*All questions are of equal value.*

1. Explain the following variations of a cheque :—(a) payable to bearer, (b) payable to order, (c) crossed to a particular bank, (d) crossed 'a/c payee only.'

2. Briefly describe the main sources from which a bank derives its profits.

3. Write out a specimen order given by a wholesale dealer to a manufacturer.

4. A certain commodity may be bought at 1s. 2d. per yard or at 6.50 fr. per yard. At what rate of exchange is the latter the cheaper price?

5. Describe the machinery by which tea passes from the Indian plantation to the foreign consumer.

6. Explain the utility of Cost Accounts in the case of a manufacturing concern.

7. Explain the following terms :—(a) paying-in-slip, (b) stale cheque, (c) certificate of posting, (d) postal order, (e) credit note, (f) journal entry.

8. You are manager of an Accident Insurance Company. An insured person has met with an accident whilst in an intoxicated state, this being expressly excluded by the conditions of the policy. The insured person, however, makes a claim and your Agent strongly insists upon you to admit the claim as he is a valuable client. Reply suitably to the Agent.

9. Mention the main points of distinction between a partnership and a company.

10. What is a Consular Invoice? Explain its importance in foreign trade, and give a specimen of the declaration required in it.

11. Name the countries where the following coins are in circulation :—(a) Zloty, (b) Piastre, (c) Yen, (d) Dinar, (e) Krone, (f) Peseta.

12. The following letter has been received in reply to an advertisement in the *Liberty* of the 17th of April, 1930, for an appointment as a general clerk with knowledge of accounts in a mercantile firm :—

' Gents,

I have seen your advt. Am a Matriculate of the Cal. Univ. I have learnt book-keeping in Ghosh and Mitter's Institute and am regarded as a very efficient accountant by my friends. I think the appointment in your office will quite suit me. So please send me a letter of appointment at an early date.

Yours,

R. C. Banerjee.

Address.

R. C. Banerjee, Esq.,  
39, Mirzapore St.,  
Calcutta.'

Rewrite the above letter in proper form.

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# Intermediate Examination,

1931

## ENGLISH

### FIRST PAPER.

*Paper-Setters*— { REV. FATHER F. X. CROHAN, S.J.  
MR. BIJAYGOPAL MUKHERJEE.  
DR. HARENDRACOOMAR MOOKERJEE, M.A., PH.D

*Head Examiner*—DR. SRIKUMAR BANERJEE, M.A.

*Examiners*— { MISS STELLA BOSE, M.A.  
MR. KAMALKRISHNA GHOSH, M.A.  
,, BANABIHARI DAS, M.A.  
,, ACHYUTAKUMAR DATTA, M.A.  
,, JITENDRANATH CHAKRABARTI, M.A.  
,, NRIPESCHANDRA GUHA, M.A.  
,, DEBENDRAKUMAR SEN, M.A.  
,, HARENDRACHANDRA CHAKRABARTI, M.A.  
,, HARICHARAN MUKHERJEE, M.A.  
,, SATYASARAN KAHALI, M.A.  
,, SURYYAKUMAR BHUIYAN, M.A.  
,, PRAMATHABHUSHAN MUKHERJEE, M.A.  
,, DEBENDRANATH CHATTERJEE, M.A.  
,, PRAPHULLARANJAN DHAR, M.A.  
,, PRAPHULLAKUMAR DAS.  
,, BANIKANTA KAKATI, M.A.  
,, BIBHUTIBHUSHAN GHOSHAL, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either, Reproduce in your own words the story of Laodamia as told by Wordsworth. What lesson does the poet teach by that story?* 18

*Or, Give a summary of the speech of Antony (in Julius Caesar, Act III, Scene ii), and show how it reveals the character of the speaker.* 18

2. Explain *two* of the following passages :—

24

- (a) And Ardennes waves above them her green leaves,  
Dewy with Nature's tear-drops as they pass,  
Grieving, if aught inanimate e'er grieves,  
Over the unreturning brave, alas!  
Ere evening to be trodden like the grass  
Which now beneath them, but above shall grow  
In its next verdure . . .

Show from the above passage that this poet's attitude towards nature differs from that of Wordsworth.

- (b) Yet all experience is an arch wherethro'  
Gleams that untravell'd world, whose margin fades  
For ever and for ever when I move.  
How dull it is to pause, to make an end,  
To rust unburnish'd, not to shine in use!  
As tho' to breathe were life.

What light does this passage throw on the character of the speaker?

- (c) Yet, be it less or more, or soon or slow,  
It shall be still in strictest measure even  
To that same lot, however mean or high,  
Toward which Time leads me, and the will of Heaven.  
All is, if I have grace to use it so,  
As ever in my great Task-Master's eye.

Show clearly how the Parable referred to in the above passage applies to the case of Milton.

3. *Either*, What do you learn from *The Lady of the Lake* about the character, manners, and customs of the Highlanders of Scotland?

24

*Or*, Discuss the relevancy of the introduction—(a) of the episode of Blanche in Canto IV, (b) of the ballad *Alice Brand* in Canto IV, and (c) of the Guard-room scene in Canto VI, of *The Lady of the Lake*.

24

4. Explain *one* passage from Group A, and *two* passages from Group B :—

24

A

- (a) You see the guardian champion's sword :  
As lightly it trembles in his hand,  
As in my grasp a hazel wand;  
My sire's tall form might grace the part  
Of Ferragus, or Ascabart.  
(b) Where twined the path in shadow hid,  
Round many an insulated mass,  
The native bulwarks of the pass,  
Huge as the towers which builders vain  
Presumptuous piled on Shinar's plain.

B

- (c) A little while I stood,  
Breathing with such suppression of the heart  
As joy delights in; and with wise restraint  
Voluptuous, fearless of a rival, eyed  
The banquet.  
(d) Fox-glove and night-shade, side by side,  
Emblems of punishment and pride,  
Group'd their dark hues with every stain  
The weather-beaten crags retain.

- (e) To make this earth, our hermitage,  
A cheerful and a changeful page,  
God's bright and intricate device  
Of days and seasons doth suffice.

8. Annotate *five* of the following expressions :—thou many-headed monster-thing; the Lupercal; the rainy Hyades; the red streamers of the north; the conscious Parcae; the unmoored cloud-galleons; Beltane game; the fatal Ben-Shie's boding scream.

16

### SECOND PAPER

*Head Examiner*—MR. SATISCHANDRA DE, M.A.

<i>Examiners</i> —	{	MR. BHOLANATH CHAKRABARTI, M.A.
		„ MOHINIMOHAN MUKHERJEE, M.A.
		„ JITESCHANDRA GUHA, M.A.
		„ SOMESWARPRASAD MUKHERJEE, M.A.
		„ BATUKNATH BHATTACHARYYA, M.A.
		„ PANCHANAN GANGULI, M.A.
		„ AMIYAKUMAR SEN, M.A.
		„ JYOTSNAMAY BOSE, M.A.
		„ JATINDRAMOHAN GHOSH, M.A.
		„ SASIKUMAR GHOSH, M.A.
		„ SUSILCHANDRA DATTA.
		„ BIJAYRANJAN DASGUPTA, M.A.
		„ BIRENDRABINOD RAY.
		„ KIRTISCHANDRA BANERJEE.
		„ PRAPHULLAKUMAR BANERJEE.
		„ SOMNATH MAITRA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Show by references to your text that 'the interest of the *Odyssey* is intensely human.' 16

*Or*, Point out some instances in which Homer is found to be 'one of the most interesting, because assuredly one of the most unconscious, commentators on the Bible.'

2. State what you know about any *two* of the following :— 12  
Circe, Eumæus, Antinous.

3. Explain with reference to the context any *two* of the following :— 14

(a) Viewed with reference to the tone of the age as regarded the duties of women,—compared with the parting charge of Hector in the *Iliad* to the wife he loved so tenderly, and even with a higher example in Scripture,—there is nothing startling or repulsive in such language from a son to his mother.

(b) Among all the heroes of *Iliad* or *Odyssey* there is no Sir Galahad.

(c) *Ulysses*, both in the *Iliad* and in the *Odyssey*, is the diplomatist of his age.

4. What idea can you form of Scott's character from his attitude after the failure of Ballantyne & Co.? Do you think it was a pose assumed to deceive the world? Give reasons for your answer. 14

5. Explain with reference to the context *any three* of the following :— 18

(a) 'Beyond Hyde Park,' says Sir Fopling Flutter, 'all is a desert.'

(b) It is an impressive truth that sometimes in the very lowest forms of duty, less than which would rank a man as a villain, there is, nevertheless, the sublimest ascent of self-sacrifice.

(c) Frankly, I cannot think of flinging aside the half-finished volume, as if it were a corked bottle of wine. . . I may, perhaps, take a trip to the Continent for a year or two, if I find Othello's occupation gone, or rather Othello's reputation.

(d) Finch, who had the day before been universally reviled, was now universally applauded.

6. *Either*. Write a short estimate of Christ as a great teacher, illustrating your answer by quotations from or references to your text. 12

*Or*. Compare Christ with any other Oriental moral or religious teacher with whose life, writings, or sayings you are familiar.

7. Annotate *any two* of the following :— 14

(a) And he came and dwelt in a city called Nazareth; that it might be fulfilled which was spoken by the prophets, He shall be called a Nazarene (Douay Version—Nazarite).

(b) I say unto you, It shall be more tolerable for the land of Sodom and Gomorrah in the day of judgment, than for that city.

(c) Render therefore unto Caesar the things which are Caesar's; and unto God the things that are God's.

### THIRD PAPER

*Head Examiner*—MR. RAJANIKANTA GUHA, M.A.

<i>Examiners</i> —	MR. DIGINDRANATH MAJUMDAR, M.A.
	.. SARATCHANDRA GUPTA, M.A.
	.. HRISHIKES BOSE, M.A.
	.. JNANADAKANTA GANGULI, M.A.
	.. PRIYARANJAN SEN, M.A.
	.. JATINDRANATH CHAKRABARTI, M.A.
	.. DWIJENDRANATH BHATTACHARYYA, M.A.
	.. BANKUBIHARI BHATTACHARYYA, M.A.
	.. SASIMOHAN CHAKRABARTI, M.A.
	RAI RADHIKANATH BOSE, BAHADUR, M.A.
	MR. SURENDRANATH RAY, M.A.
	.. ABU HENA, M.A.
	.. GIRIJAKANTA MAJUMDAR, M.A.
	.. GOPALCHANDRA BHATTACHARYYA, M.A.
	.. ANANDAKRISHNA SINHA.
	.. ARTHUR MOWAT, M.A. (EDIN.).

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Write an essay on one of the following subjects :— 10

- (a) The value of science in everyday life.
- (b) The fascination of travel.
- (c) Mental culture and the need of it at the present day.
- (d) The heights by great men reached and kept,  
Were not attained by sudden flight.

2. Give in your own words the substance of one of the following passages :— 20

(a) Would you know whether the tendency of a book is good or evil, examine in what state of mind you lay it down. Has it tended to make you dissatisfied and impatient under the control of others? Has it disposed you to relax in that self-government, without which both the laws of God and man tell us there can be no virtue, and consequently no happiness? Has it attempted to abate your admiration and reverence for what is great and good, and to diminish in you the love of your fellow creatures? Has it addressed itself to your pride, your vanity, your selfishness, or any other of your evil propensities? Has it defiled the imagination with what is loathsome, and shocked the heart with what is monstrous? Has it disturbed the sense of right and wrong which the creator has implanted in the human soul? If so—if you were conscious of all or any of these effects—or if having escaped from all, you have felt that such were the effects it was intended to produce, throw the book into the fire whatever name it may have on the title-page! Throw it in the fire though it should have been the gift of a friend.

(b) That nothing in Nature is stagnant—that everything is capable of and demands development, and that education is second only to Nature in its effects—these are truths that require no proof, for they are almost axiomatic. They govern the world of matter, and still more, the world of mind. Nature never rests; and its glories and splendours that make pale with wonder the observer of refinement and sensibility, are not the work of a moment, but the result of slow growth and development, carried out in obedience to secret but imperative laws. Those great shining worlds that rest in the Dome of Immensity, apparently so silent and still, have been moulded out of nebulous and other matter, have been subjected to the action of fire, have been and still are the theatres of the mightiest upheavals and revolutions. Stars have grown into space, have revolved in their orbits, and have been broken into fragments, and these in turn have resolved themselves into gases, and these in turn have formed in the hands of the Almighty Creator the material from which new and more beautiful worlds have arisen.

3. Give clearly the meaning of the following poem :— 20

Sun and blue above you, see!  
Round you is the morning;  
Spring is breaking in the tree  
Spring with hope returning  
Courage then, despairing heart,  
(Links of love may sever,  
Friendship die and youth depart)  
Hope is young for ever!  
While the tinted skies unfold  
Wonder lights of even;

While the stars are strewn like gold  
Down the arch of heaven;  
There are fields where you may toil,  
Space for high endeavour,  
Where the earth is rich with soil,  
Hope is young for ever!

4. Name and define the figures of speech contained in any *three* 16  
of the following sentences :—

- (a) Cowards die many times before their deaths.
- (b) He was not the master but the slave of his speech.
- (c) Thrice is he armed that hath his quarrel just.
- (d) His looks drew audience and attention.
- (e) No maiden's hand is around thee thrown.
- (f) Swiftly flies the feathered death.

5. Scan one of the following extracts, and name the metre in 10  
which it is written :—

- (a) Lightly they'll talk of the spirit that's gone  
And o'er his cold ashes upbraid him;  
But little he'll reck if they let him sleep on  
In the grave where a Briton has laid him
- (b) Fear no more the heat of the sun,  
Nor the furious winter's rages;  
Thou thy worldly task hast done,  
Home art gone and ta'en thy wages.

### BENGALI VERNACULARS

*Paper-Setters*— { MR. SYAMAPRASAD MOOKERJEE, M.A., B.L.,  
Barrister-at-Law.  
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*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Either, Give the gist of the lesson in 'Agni-Mantra' by Keshab Chandra Sen. 10

Or, State the ideas of Bankim Chandra Chatterjee as to what should be the principal aim of human life, as expressed in his article "মহত্ব কি?" 10

2. Explain with reference to the context any two of the following extracts :— 10

(a) বাহুলতা বহিয়া রূপ খসিয়া খসিয়া পড়ে, তাই বলয়-চূড়-অনন্ত-বন্ধনে : ধরা রাখিতে হয়। ভাল, জিজ্ঞাসা করি তাহাতে শোভা বাড়ে, না কমে? ভালও ত সুরের নিগড়, ঐ নিগড় ভাঙিলেই কি ভাল?

(b) আর দুদিন পরে, বাঁহারা ইচ্ছা করিলে, তর্জনীহেলনে দেশের লোক-মত পরিচালন করিতে পারিবেন, সেই যুবক-বৃন্দ বঙ্গভাষার চর্চায় মনোনিবেশ করিয়াছেন,—বিশ্ববিদ্যালয়ে বঙ্গভাষার আসন পড়িয়াছে, খেতদ্বীপের মাতৃভাষার পার্শ্বে বঙ্গের খেতশতদলবাসিনীর আসন স্থাপিত হইয়াছে, বঙ্গের তথা বঙ্গভাষার ইহা পরম কল্যাণের কথা। বাদ্যালীর টেহা মাহেন্দ্ররূপ।

(c) আমি বলিতে পারি, সংস্কৃত সাহিত্যে কাব্য-যজ্ঞশালার প্রান্ত-ভূমিতে যে কয়েকটি অনাদৃতার সহিত আমার পরিচয় হইয়াছে, তাহার মধ্যে উর্জিলাকে আমি প্রধান স্থান দিই।

3. What are the rites of Sati described by Madhusudan Datta in his account of Pramila's ascending the funeral pyre of her husband? 8

4. Explain any four of the following passages, giving full references :— 12

(a) ধুতুরার মালা যেন ধুর্জটির গলে।

(b) হে নিস্তরু গিরিরাজ, অশ্রুভেদী তোমার সংগীত  
তরঙ্গিয়া চলিয়াছে অমৃদান্ত উদাস্ত স্বরিত  
প্রভাতের দ্বার হ'তে সন্ধ্যার পশ্চিম নীড় পানে

- (c) দিলে আজি দেখা  
ধরিজীর সন্তোজাত কুমারীর বত  
সরল হৃদয় শুভ্র ।
- (d) ওরে বাছা মাতকোষে রতনের রাজি ;  
যা ফিরি, অজ্ঞান তুই, যারে ফিরি যবে !
- (e) বাধিয়া পাষাণভূপ, অবনীতে অপক্লপ  
দেখাইল মানবের কি কৌশল-বল  
প্রাচীন মিশরবাসী কোথা সে সকল ?

5. (a) Construct a sentence to illustrate the use of each of the following words :— 5

গড়ালিকা, অনাহত, তথী, অমুয়া and অমুলোম ।

(b) Form adjectives from any six of the following :— 8

উপলব্ধি, আঘাত, সাহিত্য, পরিচয়, বায়ু, শ্রম, আরোহণ, বিহ্বল,  
গান, and কোতুহল ।

(c) Form nouns from any four of the following :— 9

প্রপীড়িত, আহত, স্নগর, অনাদৃত, দক্ষ, বিপ্রলব্ধ, পরাক্রান্ত,  
and অনভ্যস্ত ।

6. Amplify the idea contained in the following passage :— 15

ধন্য, আশা কুহকিনি ! তোমার মায়ায়  
অসার সংসারচক্র ঘোরে নিরবধি ।  
দাঁড়াইত স্থির ভাবে, চলিত না হায় !  
মন্ত্রবলে তুমি চক্র না ধুরাতে যদি !  
ভবিষ্যৎ-অন্ধ হুট মানব সকল  
ঘুরিতেছে কক্ষক্ষেত্রে বর্তুল আকার  
তব ইন্দ্রজালে মুগ্ধ ; পেয়ে তব বল  
যুঝিছে জীবন-যুদ্ধ হায় ! অনিবার ।  
নাচায় পুতুল বধা দক্ষ বাজিকরে,  
নাচাও তেমতি তুমি অর্কচাঁদীন নরে ।

7. Translate into Bengali :—

When Nimai was a mere lad of fifteen years, the great sannyasi Iswar Puri used to pay a visit to Nadia now and then. The citizens of Nadia accorded a hearty welcome to the learned scholar and saint on those occasions. As a young boy Nimai also went to see him along with his friend Gadadhar; and as the sannyasi had a sweet and persuasive power of speech, everyone who heard him was impressed by the spiritual truths which he preached. Nimai also felt the fascination of his words, and sat for hours together listening to the discourses of the old man. And when he returned home, his mother Sachi Devi wept while embracing him with affection. 'Do not go to that

sannyasi any more, my darling,' she said one day weeping, 'I do not wish after what I have suffered, that you should go to any sadhu.'

8. Write an essay in Bengali on any one of the following :—

20

(a) What remedies would you suggest to remove the economic distress of Bengal?

(b) Take a survey of the village life of Bengal, past and present, and propose improvements which would make our villages habitable and prosperous once more.

(c) Draw a plan of your library, showing what books it should contain, giving reasons for your choice.

## HINDI

**Paper-Setters**— { LALA SITARAM, B.A.  
PANDIT SAKALNARAYAN SARMA.

**Examiners**— { PANDIT SAKALNARAYAN SARMA.  
MR. NALINIMOHAN SANYAL, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Summarize in Hindi the account of युद्ध का नाश as described in the *Mushal-Parva*. 8

2. Explain any two of the following extracts in Hindi :—

12

(a) मेघश्याम सजल समूह लै मतंग भुंड  
लाल खेत पीत बाजिराज ठहरात हैं ॥  
गरज नगार धुंधकार से कठोर घोर,  
मन्द मन्द सौर गजघंट चहरात हैं ।  
पाव दल आवत से मारत प्रचंड पूर्व  
खन्दन समूह बेनिहच यहरात हैं ।  
पावस प्रभाव न बखानि जात रेजनाथ  
बौलुली चमाक सो पताक फहरात हैं ॥

(b) चंपकलता की मेल कौन्ही है तमाल संग  
मानी कोऊ बाला वर पायो नमसाली है  
प्ररन सुरंग खच्छ फूलन की ब्यारी रची  
मानी मनिचीकन की मुखमा गिराली है ।  
हुमन बसाये हैं विहंग बरबेनवारे  
मानी गान मंगल को विदित प्रनाली है ।  
ईपति बिबाह को उछाह होत देखे जाहि  
बासी यहि बाग को प्रवीन कोउ मासी है ॥

(c) क्यों तू भरि गुमान इतरात ।

इत उत चमकि फूलि निज छवि पै रे खद्योत इठलात ।

है दिन चारि साहिबो तेरी जब हौ लौ बरसात ।

तापै भानु समान होन को अरे मूढ़ ललचात ।

भानु उदय कोउ देखि न परिहै काँच न पुझिहै बात ।

रवि कुल रवि प्रताप के आगे रिपुकुल मानत मात ॥

3. Explain the following phrases :

8

राय नाकिस, जा निसार, सुँह को खाना, प्रेम प्रतिमा, प्रभंजन पुत्र, पुनरुक्ति  
शुपीश्रय, सुधाधर, यमयातना ।

4. Explain the allusions in the following extract in Hindi :—

6

जाय सौस वर धर्म हित यह सि सो दिया थाप है ।

5. Give some rules for the formation of abstract nouns from verbs.

6

6. Summarize the following passage in Hindi :—

15

क्या बिना देशदेशान्तर और हीपहीपान्तर में राज्य वा व्यापार किये स्वदेश को  
उन्नति कभी हो सकती है ? जब स्वदेश ही में स्वदेशी लाग व्यापार करने और  
परदेशी स्वदेश में व्यवहार वा राज्य करें तो बिना दारिद्र्य और दुःख के दूसरा कुछ  
भी नहीं हो सकता । क्या सब बुद्धिमानों ने यह नियम नहीं किया कि राजपुरुषों में  
युद्ध समय में भी चौका लगाकर खाना अवश्य पराजय का हेतु है ?

7. Translate into Hindi :—

15

To Babur, the founder of the Mughal dynasty, India is indebted for the introduction of its melons and grapes, and to his grandson Jahāngīr for tobacco. For the introduction of opium we have no date, and it is not even mentioned in the poems of Chand. This pernicious plant has robbed the Rajput of half his virtues, and while it obscures these, it heightens his vices, giving to his natural bravery a character of insane intelligence, an air of imbecility.

8. Frame sentences to illustrate the use of the following :—

10

तेवरी बदलना, घर करना, हाथ आना, हाथ मलना, हाथों हाथ, हाथ पांव  
मारना, हाथ पसारना, सुझो गरम करना, मूठ मारना, आँख लगना ।

9. Write an essay in Hindi on one of the following subjects :

20

(a) हिन्दी साहित्य पर अँगरेजी का प्रभाव ।

(b) समाचारपत्रों की उपयोगिता और उनका जनता पर प्रभाव ।

(c) हिन्दुओं की सभ्यता का अजर शाश्वत देशों पर ।

## ASSAMESE

*Paper-Setters*— { SRIJUT JNANANATH BORAH, B.L.  
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*Examiner*—MR. AMBIKANATH BORAH. M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Trace briefly the growth of the conflict between capital and labour, indicating the future, as pointed out in বৃহত্ত্ব। 8  
*Or*, State briefly the hindrances in the way of universal brotherhood.
2. *Either*, State the main causes that contributed to the downfall of the Ahom Kingdom. 8  
*Or*, State the general characteristics of the Ahom system of administration, with special reference to the powers of the sovereign and his ministers.  
*Or*, What was the state of education in Assam during Ahom rule?
3. Write a critical estimate of *Kumār haran*, touching on the following points :—its diction and subject-matter, its appeal to readers, how, far it reflects the feelings and traditions of the Assamese people. 8
4. Explain, in Assamese, with reference to the context, one 4 × 4 passage from each of the following groups :— =16

## GROUP A

(a) ধৰ্ম্মভাবে যেনেকৈ হিংসান্নি জ্বলাই সহস্র বছৰ ধৰি মানব-সমাজত প্ৰলয় মিলালে জাতীয়ভাবেও তেনেকৈ যুদ্ধ-বিগ্ৰহ কৰাই জগতক জ্বলাকলা কৰিছে।

(b) যেতিয়া বাস্তৱতে জাতিসমূহৰ মাজত প্ৰেমৰ আন্দোলন হ'ব তেতিয়া ধৰ্ম্মভেদ থাকিব নোৱাৰে।

## GROUP B

(a) মানুহেই দেৱ মানুহেই সেৱ  
মানুহ বিনে নাই কেৱ।  
কৰাঁ পূজা—অৰ্ঘ্য পাদোদক লৈ—  
জয় জয় মানৱ দেৱ।

(b) জনপূৰ্ণ নিৰ্জনত কতা লগৰীয়া ?  
বিশ্ব সংসাৰত হায় অকলসৰীয়া।

## GROUP C

(a) জয়মতীয়ে জীৱন গান কৰি যি পতনোদ্ভূত ৰাজ্য ঢোকা দি ৰাখিলে তেওঁৰ নাতি বোৱাৰী হুলস্থবীয়ে সেই ৰাজ্যক আক অলপ হলালে।

(b) এই দেশৰ প্ৰাচীন বাসিন্দাৰ সকল দুই শ্ৰেণীৰ, অসমীয়া আৰু  
কলিতা।

GROUP D

- (a) ছৰাল-কালত বাপে লাগে বাখিৰাক।  
যুৱা ভৈলে লাগয় স্বামীৰ বাখিৰাক।  
শেষ কাল ভৈলে পুত্ৰে বাখে ভাল কৰি।  
তিনিউ কালত কত্ৰা নোহে সন্তস্তৰী॥

- (b) যতোক পুৰুষ আছে চৈধ্যয় ভুবনে।  
যেকত কৰিয়া পটে লিখিবোঁ এখনে॥

5. Frame sentences illustrating the meaning of any five of the following expressions :—

হাত দীঘল ; পেট ভাটো ; পানীৰ মিঠে ; ভাতে-ভুঁড়ালে খোৱা ;  
পাই বুৰ মৰা ; চাউল চুকা ; ধোদৰ পচলা ; লেবেলা সাদৰ।

6. Translate into Assamese one of the following passages :—

(a) The popularity of the Assamese Vaisnava dramas has continued till this day. The performances are known as *bhāwanās* and they are held in the *nām-ghars* or houses of public gathering attached to every Assamese Hindu village. The anniversaries of the saints and the important festivals of the year are occasions when these plays are enacted in the public halls without the aid of a stage or scenes. They are also performed on other occasions which necessitate a large congregation of individuals, such as marriage; and *srāddhas*, in temporary sheds erected for the purpose close to the residences of the individuals or families who perform the ceremonies. The Ahom monarchs honoured distinguished visitors to their courts by inviting them to witness the performance of *bhāwanās* arranged for that sole purpose. A stranger paying even a flying visit to any Assamese village will hear the music of drums indicating that rehearsals are going on for some dramatic entertainment. It has been customary with the Vaisnava *satrādhikārs* of the Assamese monasteries to give tokens of their learning and religious zeal by first composing a drama before they are formally ordained as pontiffs.

(b) Thirty thousand souls were carried away by the Burmese from Assam alone. To row the people they were flayed alive, burnt in oil, or driven in crowds into the village prayer-houses which were set on fire; women, old as well as young, were assaulted with every form of barbarity; sometimes bamboo cages would be constructed to burn men, women, and children two hundred or so at a time; and the more imaginative among the Burmese soldiers would add variations, such as cutting pieces off the bodies of their lingering victims, under whose eyes they would eat the raw flesh. Such being their energy, it is hardly surprising that the Burmese should, during the seven years of their intervention in Assam, have reduced the population by more than half, that some places are still suffering from this devastation and depopulation, and that in many a village to-day men speak with a dread and shudder of *Mānar Upadrah*, 'the oppressions of the Burmese.'

7. Give the substance, in Assamese, of one of the following passages :—

(a) মহুঘ-সমাজ এটা বৃহৎ বয়ৰ নিচিনা, আৰু প্ৰত্যেক মহুঘ  
সেই বয়ৰ একোটা অঙ্গ বিশেষ। বিয়ান দিন এই অঙ্গবিলাকে নিজৰ

কৰ্তব্য কৰ্ম কৰি থাকে, সিমান দিন সমাজ সুকলমে চলি থাকে ; বেতিয়া কোনো এটা অঙ্গই তাৰ কৰ্তব্য কৰ্মৰ ত্ৰুটি কৰে, তেতিয়া সমাজত বিভ্রাত উপস্থিত হয়, অৰ্থাৎ সমাজ-শৃঙ্খলাত আউল লাগে। মনুষ্যৰ কৰ্তব্য সং হোৱা। জ্ঞানবুদ্ধি উপাৰ্জন কৰি নিজৰ উন্নতি আৰু আনৰ উপকাৰ সাধন কৰা মনুষ্যৰ কৰ্তব্য। পিতৃ-মাতৃ আৰু পুত্ৰ-কন্যাৰে নিজৰ পৰিয়ালক পালন কৰা, আৰু ওচৰ-চুবুৰীয়া বন্ধু-বান্ধবক সহায় কৰা মনুষ্যৰ কৰ্তব্য। হিংসা-কপট পৰিত্যাগ কৰি সকলোৰে সৈতে মিলি থকা মনুষ্যৰ কৰ্তব্য। তইবোৰ কৰ্তব্যৰ ত্ৰুটি কৰিলেই নবসমাজত বিশৃঙ্খলতা উপস্থিত হয়।

(4) সমাজিক সৰুৰে পৰা মহৎ আদৰ্শ দেখুৱাই সংসাহী আৰু চৰিত্ৰবন্ত কৰিবলৈ আৰু নতুন যুগৰ উপযোগী কৰি শিক্ষা দিবলৈ জননী নিজে শিক্ষিত হ'ব লাগিব। মানৱ জীৱন অতি দুৰ্লভ বস্তু। এই ঋন্তেকীয়া মানৱ জীৱনত জ্ঞানৰ সমান অমূল্য আন একো নাই। এই পবিত্ৰ জ্ঞানমূল্যৰ পৰা নাৱাক বঞ্চিত কৰি বাখিবৰ পুৰুষৰ একো অধিকাৰ নাই। বহুতৰ বিশ্বাস যে তিবোতক অজ্ঞান-তিমিৰত ৰখাই ভাল, কাৰণ শিক্ষাৰ পোহৰ পালে বোলে তেওঁ লোকৰ নাৰীত আৰু মাতৃত্বত অশেষ বিঘিনি জন্মে। এনে ধৰণৰ অদ্ভুত মতাবলম্বীসকলক আমি এটি উপমা মাথোন দেখুৱাওঁ। ধৰা, কোনো গৃহস্থৰ বাৰীত আম আৰু লেচু দুজোপা গছ আছে। গৃহস্থই যদি দুজোপা গছত বন্ধ কৰি সাৰ দিয়ে তাৰ পৰা লেচুৰ "লেচুত্ব" আৰু আমৰ "আমত্ব" পূৰ্ণমাত্রা বিকাশ হ'ব, আম আৰু লেচু গৈ একেজাতীয় ফলত কেতিয়াও পৰিণত নহয়। সেইদৰে তিবোতক শিক্ষাৰ সাৰ দিলে নাৰীত্বৰ সৰ্ব্বাঙ্গ বিকাশহে হ'ব, তাৰ লোপ হ'ব কোনো সম্ভাৱনা নাই।

8. Write an essay in Assamese on one of the following subjects :—

20

(a) The purda system, with special reference to the custom in vogue amongst the Assamese people.

(b) The present system of education; its merits and defects, with suggestions for its improvement.

(c) The various means of livelihood open to an educated young man in Assam.

(d) The martyrdom of Princess Jaymati.

(e) Plain living and high thinking.

(f) One of the following Assamese celebrities :—Purnananda Buragohain, Haradatta Chaudhury, Anandaram Dhikial Phukan, Bholanath Borooah, Abdul Majid.

ORIYA

*Paper-Setters*— { MR. KASINATH DAS, M.A.  
REV. BRAJANANDA DAS, B.A.

*Examiner*—REV. BRAJANANDA DAS, B.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any one of the following passages into Oriya :— 15

(a) A villager had a beautiful thatched cottage to live in, but he was worried by small birds who used to flock on the roof for straws to prepare their nests. The villager tried all devices to frighten the birds away, but with no success. Eventually he was so upset that one day he took a match-box and began to throw the lighted sticks one after another on the roof. Subsequently the cottage was on fire, and he went from village to village telling every one he met that he had removed the root-cause of his trouble, and the pests would no longer be able to worry him.

(b) Disappointed in his endeavour to conquer the south, enfeebled in health, distrustful of his sons and of all the world, Aurangzeb passed some of the most unhappy days of his life immediately before death. In the north he had alienated the Rajputs and other Hindus who had been a stay and support to the Mughal throne. Both Akbar and Aurangzeb were famous for bravery in war and for abilities in administration, but Aurangzeb was distinguished by a narrow bigotry which wrecked the great empire which he had inherited.

2. Write an essay on any one of the following :— 20

- (a) Knowledge is power.
- (b) Any great Indian hero or reformer.
- (c) Any Indian festival.



3. Explain the following with reference to the context :—

29

ଚିଲିକା, ଗୋହର ଏହି ଗୋରାବନ  
 ବଣ୍ଟୋସୁବନୟ ଦୃଶ୍ୟ ସାୟନ୍ତନ,  
 ଅଟେ ସର୍ବ ଗୋରା ସୀମନ୍ତର ଟୀକା  
 ପ୍ରକୃତିର ଗାରୁ ଆଲେଖ୍ୟ ଗାଳିକା  
 ଏ ସୁଖର ମୁହିଁ ନୁହଇ ରାଜନ  
 ମୋ ରାଗେ ଏ ସିନା ରଞ୍ଜୁର ସୁପନ  
 ସଂସାର - ନିଗଡେ ସଂସାର - କାରାରେ  
 ଯାପିବି ଜୀବନ ସଦା ହାହା କାରେ ॥

ସୁଖରୂପେ ଯାହା ଜନ ନେତ୍ରେ ଦିଶେ,  
 ହାତେ ଆସେ, ହାତୁଁ ପଡ଼ିବା ପାଇଁ ସେ,  
 ବସୁ ନୁହଇ ସେ ଅଟଇ ଝିଅମ  
 ଅନ୍ୟ ନାମ ତାର ଆକାଶ-ଦୁଷ୍ମନ ॥

4. Rewrite the following in your own words :—

10

ଆମ୍ଭେମାନେ ଯେବେ ଯଥାର୍ଥ ମନୁଷ୍ୟ ହେବା ତେବେ ସବୁଠି-  
 ମାନ କଦାପି ମିଥ୍ୟା ବୋଲି ବିଶ୍ୱାସ ହେବ ନାହିଁ । ବିଜ୍ଞାନର  
 ସ୍ଥାନାବରୋଧକତା ନିୟମାନୁସାରେ ଯେଉଁ ହୃଦୟରେ ବିଷୟ-ବାସନା  
 ପୂର୍ଣ୍ଣ ଅଧିକାର କରି ଅଛି, ସେଠାରେ ସାଧୁରାବ କଦାପି ସ୍ଥାନ ପାଇ  
 ନ ପାରେ । ସେହି ହେତୁରୁ ଜଣେ ମହାତ୍ମା କହି ଅହି ଅଛନ୍ତି ଏବଂ  
 ମନୁଷ୍ୟ ଦୁଇ ପ୍ରଭୃତି ଦାସତ୍ୱ କରି ନ ପାରେ ॥

5. Frame sentences to illustrate the meanings of the following :— 10

(a) ଚାଲିଲା ଗଗଡ଼ରେ ହାତ ଦେବା,

(b) ଛାଇ ପଡ଼ିଲେ ଡେଇଁବା,

(c) ଦାଉ ସମ୍ଭାଳିବା,

(d) ବିରାଡ଼ି ଛିଙ୍କିବା,

(e) ନରକ ଦେଖି ଲଙ୍ଘନା ।

6. Fill up the ellipses in the following :— 10

କିଛି ସମୟ — ସମସ୍ତେ ନୀରବ ରହିଲେ, ପରେସ୍ତାନ୍ତି ଅପୂର୍ବ  
— କଣ୍ଠ — କଲେ, “ମୁଁ ବୁଝୁଛି, ଏପରି — ଦୁର୍ଗମାନରେ  
— ଦେବା ଉଚିତ —, କିନ୍ତୁ ମୁଁ ସ୍ଥିର — ପାରୁ ନାହିଁ ।  
ଏ ରସକୁ — କରିବାକୁ ମୁଁ — ଚେଷ୍ଟା କରୁଛି, କିନ୍ତୁ —  
ନାହିଁ ॥

7. Change the voice in the following :— 8

(a) ମହାରାଜା ଦମରଥ ପୁତ୍ର ଗୋକରେ ପ୍ରାଣଦ୍ୟାଗ କଲେ ।

(b) ପ୍ରଭୋ, ମୋହର ମନୋରଥ ପୂରଣ କର ।

(c) ବର୍ତ୍ତମାନ ପ୍ରବନ୍ଧ ପଢ଼ି ହେଉ ।

(d) କାହିଁ ସେ ପକ୍ଷୀଟି ଆଉ ଦେଖା ପାଉ ନାହିଁ ॥

8. Substitute single words for the following :— 7

ଅନ୍ୟ ପରି ଯେ ବିନେ, ଗମନର ରଙ୍ଗ, ସ୍ବପନର ରଙ୍ଗ,

ହୃଦୟା କରିବାର ରଙ୍ଗ ॥

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## URDU

*Paper-Setter*—MAULVI A. F. M. ABDUL KADIR, M.A.

*Examiner*—MD. MAHFUZAL HAQUE.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Give a brief summary in Urdu of Muhsin-ul-Mulk's discourse on modern education and culture. 8
2. Summarize, in your own Urdu, what Hālī has said about Sa'di's early life and also indicate how he differs from Sir Gore Ouseley in fixing the date of his birth. 7
3. *Either*, Rewrite the following lines in simple and idiomatic Urdu, explaining any unusual words and phrases :— 9

سبحان اللہ ! سرآغازِ فصل میں ایسے نمبرہائے پیش رس کا پہنچنا نوید ہزارِ میمنت و شادمانی ہے یہ نمبر رب النوع انمار ہے اسکی تعریف کیا کروں کلام اس باب میں کیا چاہتا ہوں کہ میں یاد رہا اور اہدا کا آپ کو خیال آیا - پروردگار آپ کو با ایں ہمہ رواں پروری و کرم گستری و یادآوری سلامت رکھے - جمعہ کے دن دو پہر کے وقت کھار پہنچا اور اسی وقت جواب لے کر اور ام کے دو ٹوکے دیگر روانہ کیا یہاں سے اُسکو حسبِ الحکم کچھ نہیں دیا گیا \*

*Or*, Summarize the remarks made by Muhammad Husain Azād on the relative merits of Urdu and English styles in writing.

4. Discuss, in your own Urdu, the special features of the poetry of Mir Asif, giving a brief outline of his life. 8
5. Explain, in clear and easy Urdu, *one only* of the following extracts :— 8

(a) گلچین نے وہ پہرے۔۔۔ جب آرایا  
اور نخبۂ صبح کھلکھلایا  
وہ سبز باغ خوابِ آرام  
یعنی وہ بکاولی گل-اندام  
جاگی مرغِ سحر کے غل سے  
اُٹھ نکلتی ہے فوشِ گل سے

منہ دھرنے جو آنکھ ملتی آئی  
 پر آپ وہ چشم حوض پائی  
 دیکھا تو رہ گل ہوا ہوا تھا  
 کچھہ اور ہی گل کھلا ہوا تھا  
 کہبرائی کہ ہیں کدھر گیا گل  
 جہنجلائی کہ کون دے گیا جل

(b) طلی کرچکا جو منزل شب کاروان صبح  
 ہونے لگا افق سی ہویدا نشان صبح  
 گردوں سے کوچ کرنے لگے اختران صبح  
 ہر سر ہرتی بلند صدائ اذان صبح  
 پنہان نظر سے رزی شب تار ہو گیا  
 عالم تمام مطلع انوار ہو گیا  
 یوں گلشن فلک سے ستارے ہوئے روان  
 چن لے چمن سے بھولوں کو جس طرح باغبان  
 آئی بہار میں گل مہتاب پر خزان  
 مرجھائے گر گئے نمر و شاخ کھشان  
 دکھلائے طور باد سحر نے سموم کے  
 پژمردہ ہوئے رہ گئے غنچے نجوم کے

6. Use the following words in short sentences of your own indicating their genders :— 10

ماہ - شگوفہ - تھاتھہ - فاتحہ - تن - لگن - وفا - جفا -

تعویذ - عرض -

7. Reproduce the following lines in simple Urdu :— 15

میاں ! تمہارے کمال کا حال معلوم کر کے میں بہت خوش ہوا  
 اگر مجھ کو کبھی انگریزی لکھوانا ہوگا تو یہاں سے اردو میں لکھر  
 بھیج دوں گا تم وہاں سے انگریزی لکھر بھیج دیا کرنا - ” قصہ قاصدان  
 شاہی “ میں نے دیکھا اصلاح کے باب میں سونچا کہ اگر سب فقروں  
 کو مقفی اور عبارت کو رنگیں بنانے کا قصد کروں تو کتاب کی

صورت بدل جائیگی ارر شاید تمکو بھی منظر نہ ہر ناچار اسپر  
 قناعت کی کہ جو الفاظ کسال باہر تے وہ بدل دالے - مثلاً ”رے“  
 کہ یہ کنوارر بولی ہے ”وہ“ یہ تھیٹھہ اردو ہے ”کرانا“ یہ  
 بیرونجات کی بولی ہے ”کرانا“ یہ فصیح ہے ”راجے“ یہ غلط  
 ہے ”راجہ“ صحیح ہے \*

8. Translate the following lines into simple and idiomatic Urdu :— 15

Al-Mas'ūdī, the historian, relates the following anecdote of his prudence and sagacity :—Being sent by Abū Muslim to accompany the expedition against the Governor of Irāq, he and the general halted to take breakfast at a village on the way, when suddenly a herd of gazelles rushed from the desert, and ran into camp amongst the soldiers. 'General'! exclaimed Khulid, 'order the men to mount at once.' Seeing no cause for alarm, the latter asked him what he meant. Khulid replied, 'The enemy are close upon us; nothing but the march of a large force would have driven the wild creatures from the desert into our camp.' The troops were scarcely mounted, before an advancing hostile squadron was seen in the distance, and the truth of Khulid's deduction proved.

9. Write an essay in Urdu on one of the following subjects :— 20

(a) اگر امید نہ ہمسایہ ہر ترخانۂ یاس

بہشت ہے مرے آرام جادواں کے لئے

(b) اے جان بے قرار ذرا صبر چاہئے

بے شک ادھر بھی آگیا جہنم کا نسیم کا

(c) Doctor Nazir Ahmad : his early life ; his literary activities ; the part he played in developing the Urdu Language and Literature ; his social works ; his place among the Muslim reformers of India in the last century.

## PERSIAN

Paper-Setter and Examiner—AGA MD. KAZIM SHIRAZI.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Give in your own words the description given by either H.M. 10  
 the King of Persia of his visit to the Zoological Gardens of England or of his visit to Madame Tussaud's Exhibition.

2. Construct short sentences using the following expressions illustrating their meanings :— 16

ملتزمین رکاب - طاق نصرت - تا دم پلہ - پشتگ زدن - معلی  
 زدن - احترامات نظامی - سیم شبکہ - قشون ساخلو

3. By whom and on what occasion were the following remarks made? Translate them into English:— 14

ارل - بهر چه امر یا نهی کردم جد نمودم و آنرا بازیچه نشمردم  
 درم - در وعد و وعید تغلف را هرگز جایز ندانستم  
 سوم - جنگ کردم برای فایده نه از روی هوا  
 چهارم - دلهارا جنب کردم بمعبت بدون کراحت و بترس بدون کینه  
 پنجم - عقاب کردم بسزای گناه و جزم نه از جهت تغیر و غضب

4. Translate into Persian:—

15

When the gardener had dug down to a certain depth, he felt something resist the spade, and immediately discovered a gold box about a foot square, which he showed to the princess. 'This,' said she, 'is what I wanted here: take care you do not injure it with your spade.' When the gardener had got out the box, he gave it to the princess. On opening it she found it full of pearls of moderate size. They were all equal, and fit for the purpose for which they were wanted.

5. Form words with any five of the following, and give their meanings:— 10

در - چی - خوار - زار - سار - گین - گر - دان - فام

6. Give in simple Persian the substance of the following:—

15

روزی از کنار بیشه عبور میکردم دیدم موشی بجهد تمام ریشه درخت را از دندان آره صفت منفصل میسازد - درخت بزبان حال در آمد و گفت ای ستمگار دل آزار چرا بنیاد حیات مرا زیر و زبر میکنی - موش بزاری او التفات نه نمود و مشغول جفاکاری خود بود که ناگاه ماری دهان گشاده بیکدم موش را فرر برد \*

قطعه

خوبش را سوزد از نگر بیللی هر که از ظلم آتش افروزد  
 دیدد کآتش از چنار جهد همه پیوند خوبش را سوزد

7. Write an essay in Persian on one of the following:—

20

(a) هرچه کنی بخود کنی گر همه نیک ز بد کنی

(b) The value of education.

(c) A description of the Baqar 'Id festival.

## MAITHILI

*Paper-Setter*—KUMAR GANGANAND SINGH, M.A.

*Examiner*—PANDIT DEBANANDA JHA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Fully explain in Maithili, with reference to the context :— 10

परदेस गमन अनु करहु कल  
पुनमत पावे न्हतु वसन्त ॥१॥  
कोकिल कलरवे पूरल चत  
जनि मदन पठाओल अपन दूत ॥४॥  
के माननि आवे करति मान  
विरहे विषम भेल पञ्चवान ॥६॥  
बह मलयानिल पुरुष जानि  
मारए पचसर सूमरि कानि ॥८॥  
विरहे विखनि धनि किहु नहि भाव  
चानने कुङ्कुमि मखि लगाव ॥१०॥  
विद्यापति भन कण्ठहार  
कणराध वन विहार ॥१२॥

2. Briefly give the Synopsis of the first four Cantos of the *Krishnajanma* of Manabodha. 15

3. Either. Which is your favourite character in the *Sundarasam-yoga* of Jivan Jha and why? 15

Or, Write after Lāla Kavi (the author of the *Ganesa Khanda*) the importance of the offerings to Vishnu.

4. Give the purport of the following extract in Maithili :— 15

हमारा लोकनिक समाज अत्यन्त प्राचीन अछि। अन्य प्राचीन समाज जकां  
अह समाजक प्राचीन कति गौरवपूर्ण छैक। ओकर श्रुति एखनहु कर्तमान छैक।  
फलस्वरूप आधुनिक विषय सब के ई छुद्र बुझैत अछि—तन्त्र बुझैत अछि। संसारक  
परिवर्तन के ई ओतेक मद्दल नाहि दैत अछि जतेक ओकारा देव उचित। कालरूपी  
अनन्त प्रवाह अपना संगे गौरव, मर्यादा, कीर्ति सब लेन बहल जाइत अछि। मैथिल  
समाज रुपी तरिणा तटस्थ अछि। अगत्या एहि दूनूक व्यवधान चय चय बदले  
जाइत छैक। यद्यपि प्रवाहक डिग्री सं कखनहु कखनहु किहु किहु ई आन्दोलित  
होइत अछि तथापि अतात गौरव श्रुति क लहर एहेन दृढ़ छैक जे ई ओतहि अछि  
जतय हजारों वर्ष पहिने। समस्या आब उपस्थित अछि जे हमरा लोकनिक के गौरव  
बाही, मर्यादा बाही, कीर्ति बाही अथवा ओकर श्रुति। युवक अतीत क कल्पना  
करैत छथि। कल्पना ओकर तदनुशरण में चेष्टा क संचार करैत छैक। सुषमावस्था  
सं जायतसुषमावस्थामें, जायतसुषमावस्था सं जायतावस्थामें ओ अवैत अछि। देखैत अछि।

अगल कालक प्रवाह के। अगुभव करैत अह् ओहि व्यवधान के' जे ओकरा तथा काल क बीचमें पड़ि गेल छैक। अधोर भय जाइत अछि। कूदि पड़ैत अछि तरिणी सं जलमें। शक्ति लगा दैत अछि तरिणीके भूमिगत लहर सं मुक्त करवा ले। हइ सर्जक भय जाइत अछि। शिष्य भयभात भय जाइत अछि। युवक कहैत अछि “कांनो डर नहि-रचा हम सबहक करब”। येइ छैक संसार क प्रति युवक क संदेश।

5. Translate into Maithili :—

15

Lord Cornwallis had only the experience and the legacies of failure to guide him. Pressed for ways and means, and anxious for reform in more departments than one, he committed himself to a policy which in regard to the three interested parties—the Zamindar, the Ryot, and the Ruling Power—assured the welfare of the first, somewhat postponed the claims of the second, and sacrificed the increment of the third.

6. Construct sentences to explain the following proverbs :—

10

- करिया काका एक त गोरे बड़ दासरे नहयने अबैत छथि।
- गोरि माउनि गौरबोहू आन्हरि।
- छोट छिखिर के' मोट नागाड़।
- उड़ल सातु पितर के' प्राप्ति।
- पेट करे कह कह जूड़ा करे सह सह।

7. Write an essay in Maithili on any one of the following subjects :—

20

- The salt tax campaign of Mahātmā Gāndhī.
- Modern Maithili.
- Mahārājādhirājā Sir Rameswar Singh of Darbhanga.

## MARATHI

*Paper-Setters*— { PROF. D. R. BHANDARKAR, M.A., PH.D.  
MAHAMAHOPADHYAY PANDIT SITARAM SASTRI.

*Examiner*—MAHAMAHOPADHYAY PANDIT SITARAM SASTRI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Write an essay in Marathi on any one of the following :—

20

- God made the country and man made the town.
- The qualities that make a great man.
- The value of a classical education.

2. Translate either of the following passages into Marathi :—

15

(a) Many tribes still live exclusively, or almost exclusively, on wild animals, the produce of hunting or fishing. Their clothing is skins; their habitations, huts rudely formed of logs or boughs of trees, and abandoned at an hour's notice. The food they use being little susceptible of storing up, they have no accumulation of it, and are often exposed to great privations. The wealth of such a community consists solely of the skins they wear: a few ornaments, the taste for



which exists among most savages; some rude utensils; the weapons with which they kill their game, or fight against hostile competitors for the means of subsistence; canoes for crossing rivers and lakes, or fishing in the sea; and perhaps some furs or other productions of the wilderness, collected to be exchanged with civilized people for blankets, brandy, and tobacco; of which foreign produce also there may be some unconsumed portion in store.

(b) At this time there came a strange woman to the king, and offered him nine books of the prophecies of the sibyl for a certain price. When the king refused them, the woman went and burnt three of the books, and came back and offered the six at the same price which she had asked for the nine; but they mocked at her, and would not take the books. Then she went away and burnt three more, and came back and asked still the same price for the remaining three. At this the king was astonished, and asked of the augurs what he should do. They said that he had done wrong in refusing the gift of the gods, and bade him by all means to buy the books that were left. So he bought them; and the woman who sold them was seen no more from that day forward. Then the books were put into a chest of stone, and were kept underground in the capitol, and two men were appointed to keep them, and were called the two men of the sacred books.

3. Sketch the characters of रंगराव चप्पा and सय्यदुल्लाखान from Ushah- 10  
kal.

4. Explain with illustrations what you understand by 'Koti.' 10

5. Give the sense of the following in Marathi :— 15

ती धीरोदात्त सूर्ति तशीच होती. अंगकांति केवळ दैविकसंशरीराभोवतीं जणू काय एक प्रकारचे तेजामंडळ तळपत होते. आणि त्या तेजोमंडलाच्या अलीकडे पुष्पप्रतापाचे एक मंडल पहिल्या तेजोमंडलाहूनही विशेष उद्दीप्त असे दिसत होते. केवळ जे दृढ अहंने, पूर्णभक्तीने आणि सत्यनिष्ठेने समीप जाऊ पाहतील, त्यांसच त्या प्रतापापासून अगर तेजा पासून चास होणार गाही हे उघड होते. युद्ध निष्पलंक असा ज्यांचा आत्मा नाही त्यास पुढे जाणे मुद्या शक्य नव्हते. चारही प्रकारच्या योगाने ज्ञान होऊन पूर्ण ब्रह्मज्ञान झालेल्या व्यक्तीची जो स्थिति होते तीच स्थिति अगदी पूर्णपणे यापुढे पुरुषाची झाली होती असे कोणासही वाटले असते. देहाची अणुमात्र काळजी नसतां देह उत्तम प्रकाराने बांधला जाणे हे अन्तःकरण शुद्ध खेरोज कशाचे लक्षण ?

6. Give some extracts from प्रेमकाँ लौकिक which will show the social 10  
and moral thoughts.

7. Explain in Marathi the following .— 20

(a) कांणी एकाचिया पोरे' केली आळी ।

टावी नाहीं पोळी माये देखी ।

बुभाविळी हातीं देऊनी खापर ।

खंद करकर वारियेली ।

तैसे नकी कर' मज ज्ञपावंता ।

काय नाहीं सत्ता तुझे हातीं ।

तुका ज्ञावे माय-बापांचे उचित ।

करावे हे हीत वाळकांचे ॥ १ ॥

- भगवे तरी श्रान सहज वेष त्याचा ।  
 तेथे' अनुभवाचा काय पंथ ॥  
 वाढवूनी जटा फिर दाढी दिशा ।  
 तरी जंबु-वेषा सहज स्थितौ ॥  
 कीरो निया भूमि करिती मर्धोवास ।  
 तरी उ'दरास काय बाणो ॥  
 तुका ह्मणे ऐसे' कासया करावे' ।  
 दी हासि दडावे' वाचगंचि ॥ २ ॥  
 (b) क्रियेवीण माना परी बोलिजिते' ।  
 परी चित्त दक्षित ने' लाजवीते' ॥  
 मना कल्पना धौट सैराट घावे ।  
 मया मानवा देव कैसीनि पावे ॥ १ ॥  
 निवेकें क्रिया आ लो पालटावी ।  
 अतो आदरे' शुद्ध बुद्धी धरावी ॥  
 जनों बोलय्या सारिखे' चाल बापा ।  
 मनो कल्पना सोच संसार तापा ॥ २ ॥  
 बरो खान संख्या घरी एक निष्ठा ।  
 विवेकें मना आवरी स्थान खट्टा ॥  
 दया सवें भूतों जया मानवाला ।  
 सदा प्रेमळु भक्ति भावे' निवाला ॥ ३ ॥

### KHASI

*Paper-Setter*—MR. ROY ROWLAND THOMAS, M.A.

*Examiner*—RAI BAHADUR DOHORY ROPMAI, B.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate the following passage into Khasi :—

15

In a very short period of time, and with far less preparation, India has reached the stage of opportunity for women towards which Western countries have worked during centuries of literary and freedom. This has developed almost accidentally and by force of economic and other factors rather than as the result of any deliberate purpose of emancipation.

2. Compose a short story in Khasi to illustrate the maxim that honesty is the best policy.

10

3. Iathuh lyngkot shapbang Ka jingmih jong ki S'iem Synteng, Nongkhlaw, Nongspung, Nongstoin, Myriaw, Langrin, bad Susong—Durgapur.

15

4. Jathuh bniah kat kum U Nongthoh jong 'Ki Jingmlien Ha Ka Kam' mano ba ioh brabor ia 'Ka jingjop bad ka khusnam.'

20

5. Explain with reference to the context :— 15  
 Nangta sa ban iapoi h'u shnong h'u thau,  
 Ban hap iasieu katba thore ka kau,  
 Lada ia don i khun kynthai shynrang,  
 Sa ban buddien ka kyndiah kyndon sang.
6. Write an essay on *one* of the following subjects :— 20  
 (a) The choice of a profession.  
 (b) Female education in India.  
 (c) Ka Shad Nongkrem.
7. (a) Don ki jaid briew kiba duh thiah haba shem bha ki kha ki 7  
 man. Bad ki iap kut kum u bun ha la ka jong ka tdem.  
 (b) Ha u maw uba tyllum ym ju soh niut maw. Amplify 8  
 these two proverbs in Khasi.

## NEPALI

*Paper-Setters*— { RAI SAHIB HARIPRASAD PRADHAN, M.A.  
 { MR. BODHIKRAM ADHIKARI, M.A.

*Examiner*—MAJOR S. THAPPA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into Nepali any two of the following passages 40
- (a) Whenever we worship we should have in mind the thought of India as a whole, and its people as one, in spite of all the differences that exist. Through India we ought to send out spiritual force to the whole world, because India always has been and always will be the spiritual centre of the world. Go back to the great Rishis as they sat in meditation on the banks of the Ganges, they thought of India as one : its rivers, its trees, its holy places. If in our worship each person is merely thinking of his own evolution, we shall fail. We must regard ourselves as creative forces making for unity. As in the time of your forefathers, meditate on the unity of India and the one life which pervades it. Then it will become real and wonderful to you.
- (b) After the bath we generally put on clean clothes. But it often happens that you put on clean clothes only on top, and below or round the waist you keep a dirty cloth, probably because it does not show. I remember once visiting a temple at Conjeeveram. At one of the tanks a priest was taking his bath. When he came out he put on a clean dhoti, but kept still the dirty cloth, which he had around his loins. I knew he was going to function as a priest in the temple, and I was much surprised to see him perfectly contented to keep that dirty cloth under the clean dhoti. The majority of people do not seem to realize that if they wear any soiled clothes they cannot be really clean, and yet they consider themselves Brahmins and are afraid to come near the pariah. They go to the temple and feel holy and perfectly clean.

(c) We must conquer the world, beautify the world, and get all the experience of the world, and then we can throw aside all the trivial things of the world. We must perfect every little thing around us, every little thought and feeling and action. We must be constantly on the watch lest slovenliness creep into mind or action. It is the mind chiefly that has to be purified and made clean, the mind that has to be made simple. Then we shall become fit to worship truly, then we shall become of real use to the Masters, to the Devas, to the Lord.

2. Explain and expand in Nepali the ideas contained in *one* of the following passages :— 15

(a) अघि भट कुविजाको नाथ ! संगत् रुचायो ।  
चटपट गज को त्यो प्राणबाधा कुतायो ॥  
इडबड गरि दुर्मत् द्रौपदी को बचायो ।  
किन कुनि अब हाम्रा पालिमा ता ढिलायो ॥

(b) तनुमल पर सारी चित्त यो युद्ध पारो ।  
प्रकृति तिर लतारो, शक्ति दैवी उमारो ॥  
अघि जति हुन गाको पाप हाम्रो निखारो ।  
यदुकुलमणि ! हाम्रो जाति देऊ सपारो ॥

3. Depict and compare in Nepali the characters of Karna and Arjun. 15

4. Write an essay in Nepali on any *one* of the following subjects :— 80

- (a) The value of cultural education.
- (b) Universal Brotherhood.
- (c) Unemployment in India.
- (d) The natural beauties of your country.

—

## BURMESE.

aper-Setters— { MAUNG WE LIN.  
MAUNG BA. B.A.

Examiner—PROF. PE MAUNG TIN, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

- (က) ရေဇာကြိုဖြတ်ထုံးတွင် ပါရှိသည်အတိုင်း၊ ငအိသားငဦး 40  
ကိုနှင့်ဇေယျာကြီး ငကြီးတို့ယောက္ခမ သမက်အထက်ဖြစ်  
ရင်း လက်ဖွဲ့ရင်း လယ်မြေရပ်ကြောင်း။ ၂ ဦးလုဆိုကြသည်  
အမှုတွင် တရားသူကြီးထင်မြင်ယူဆချက်ကို ရေးသားဘော်  
ပြပါ။

## သို့မဟုတ်

- ရေဇာ ကြိုဖြတ်ထုံးတွင်ပါရှိသည်အတိုင်း ခုံတော်တို့ သစ္စာ  
မိဋ္ဌာန်ပြုရပုံအကြောင်းကိုရေးသားဖြေဆိုပါ။
- (ခ) အောက်ပါစာပိုဒ်သည် မည်သည့်အကြောင်းအရာနှင့်  
စပ်လျဉ်း၍ရေးသားကြောင်းဖြေဆိုပါ။  
နေ့မရသူ။ ကံမတူ၍။ လူသာမန်စား။ လားလားယုတ်  
မာ။ မဟုတ်ရာဘူး။ ဂဏာနို့ခဲ။ ထမင်းထဲမှာ။ တွဲ၍ယူဆောင်။  
ဥသျှောင်ရတနာ။ တို့နှင့်သာလျှင်။ မရွာတန်ရေး။ မယား  
မို့ ပေးလျှင်လည်း။ ကြေးငွေဒင်္ဂါး။ ပိုက်ဆံများသာပ။ မ  
ယားမဆိုး၊ လင်မဆိုး။ သူခိုးဖြင့်မဟုတ်ဘူးဆိုဖို့။ ။
- (ဂ) သုတသောမယျို့တွင်ပါရှိသော အောက်ပါစာပိုဒ်၏ အ  
နက်အဓိပ္ပါယ်ကိုဘော်ပြပါ။  
မကြာအသက်။ လျှပ်တပြက်မျှ။ ကွေးလက်မဆန့်။ ခဏခန့်  
ကြောင့်။ ပစ်စွန့်မရဲ။ ရသာစွဲကာ။ အမြဲရှည်ကြာ။ သံသရာ  
ကို။ ပမာနိုင်ကြ။ ကြံတွေးဆလေ့။ ဥာဏာမဆန့်။ တိရစ္ဆာန်  
သို့။ မဖန်မေ့ကာ။ မှတ်မဲ့သာလျှင်။ အိပ်ကာစားကာ။ မကျင့်  
ရာတည့်။ သူငါမလွတ်။ သက်ကြွင်းမှတ်၍။ ဥပါဒ်ဦးဘင်။ တွက်  
ကျုံးလျှင်မျှ။ ဘဝင်ဆိုက်ကာ။ ခြောက်ခုခွါ၌။ တဒါရုံဇော။  
ဂုဠောစလန။ သတ္တရဝယ်။ ခဏငယ်ကာ။ ငါးဆယ်ပြည့်ပြီး။

(၂)

စာဆိုတို့တွင်။ ညှိုးကြာခန္ဓာ။ မရဏာလည်း။ အကြာမပွက်။  
 ဇောငါးချက်မျှ။ ပျက်ကြာစု။ ပမာပြုသော်။ ရှင်မျှမရှည်။ တို့  
 လူပြည်ကား။ သေရည်မီးတောက်။ ခဏပျောက်ကို။ မ  
 ဖေါက်မလွဲ။ သံမှိုစွဲသို့။ အမြဲမှတ်ထင်။ စည်းစိမ်ခင်၍။ အ  
 ကြင်ရသာ။ မမက်ရာသည်။ ။ ပါယ် ရွာ အမှားမညွှာ  
 တာတည်း။ ။

(ဃ) မောင်ကုလားမဟာရာဇဝင်ကြီးတွင်ပါရှိသည်အတိုင်း အ  
 နော်ရထာမင်း အကြောင်းကို အကျဉ်းအားဖြင့် ရေးသား  
 ဘော်ပြပါ။

2. အောက်ပါစာပိုဒ်၏အဓိပ္ပါယ်စုံလင်စွာ ထင်ရှားစေခြင်းငှါ စကား  
 ပြေရေးသားဘော်ပြပါ။

15

ညဉ့်ယံအခါ။ ပတ်သာစည်ပုတ်။ တီးကြမှုတ်သို့။ တီးတုတ်ညည်း  
 ညည်း။ နရည်းလိုလို။ ဖိုကသွေးယူ။ မကမြဲ၍။ ချစ်သူကြင်ဘက်။ ရွှင်ကြ  
 လျက်လျှင်။ တောင်လက်ခါတုံ။ စာခွံတုံနှင့်။ နှုတ်ယူသယ်။ လူနယ်  
 ရည်းငံ။ ဖြည့်ဖူးသံနှင့်။ သက်နွံကျမ်းဝင်။ မွမ်းမွမ်းငြင်မျှ။ တောင်တင်  
 လည်းရှက်။ မြေဘာငှက်လည်း။ မြေထက်ပိအောင်။ ဘားအရောင်  
 နှင့်။ ဘိုးခေါင်ကျူးထိတ်။ ကရဝိတ်တို့။ ချစ်စိတ်မျှဝေ။ ရန်စဖြေလျက်။  
 သံမြေမြက်။ စာပေကျက်လည်း။ မောင်းနှက်နာရီ။ လျှောက်ချီပဟိရ်။  
 မှန်စေဆိုသို့။ လေချိုညည်းညည်း။ ရစ်လာသွင်းက။ စောင်းငြင်းတူယိုး။  
 ရွှေပြည်စိုးတုံ။ တညိုးညည်းညည်း။ လွမ်းရေးခင်းလျက်။ လူမင်းအသွင်။  
 တိမ်ပြင်ရှက်နှယ်။ ကောင်းကင်လယ်က။ ညာဘယ်ထက်အောက်။  
 ရွှေနောက်ရံက။ ကျူးသံသာနှင့်။ ငါးရာသုံးထောင်။ ရွှေမျှဘောင်  
 ဝယ်နှစ်ကောင်ကြင်ဘက်။ လှံတံခက်ကို။ နှုတ်စက်ချီကိုက်။ စီးကာ  
 လိုက်သားဦးပိုက်လည်မေ့။ ဥဩသဘော။ ရှုမောဘွယ်တံမြင်  
 သည်ရှိလည်း။ မျက်စိမညောင်။ နွေသစ်လောင်း၍။ တပေါင်းအခါ။  
 ရောက်ပြန်လာသော်။ ရိုးညွှာရွက်လွန်။ ပန်းမာလံပုံပြီး။ ညီရရိုး၍။  
 ခြောက်သီးမိုးစွန်။ နန္ဒဝန်နှင့်။ ။ သဏ္ဌာန်ဆွယ်လိမ့်မည်တမ်း။

3 မြန်မာစာစီကုံးရေးသားရာ၌။ ဝတ္ထုသွားရေးနည်း။ ရာဇဝင်ရေးနည်း  
 နှင့်။ မေတ္တာစာရေးနည်းတို့မည်ကဲ့သို့ခြားနားကြောင်းဘော်ပြပါ။

10

4. အောက်ပါ အချက် သုံးရပ်အနက် တရပ်ရပ်ကို ရွေးကောက်အ  
 ကြောင်းပြု၍စာစီကုံးပါ။

20

- (က) မြန်မာလူမျိုးတို့ထုံးစံရှိရာ ကျင်းပပေးဖြစ်သော မင်္ဂလာအခန်းအနားများ။  
 (ခ) တိုင်းပြည်အုပ်ချုပ်ရေး။  
 (ဂ) လက်မှုပညာ။

5. Translate into Burmese :

15

One of the most important lessons that experience teaches is that on the whole, success in life depends more on character than on either intellect or fortune. Many brilliant exceptions, no doubt, tend to obscure the rule, and some of the qualities of character that succeed the best may be united with grave vices or defects, but on the whole, the law is one that cannot be questioned, and it becomes more and more apparent as civilisation advances. Temperance, industry, integrity, frugality, self-reliance and self-restraint are the means by which the great masses of men rise from penury to comfort, and it is the nations in which these qualities are most diffused that in the long run are the most prosperous. The moral basis of character was the true foundation of the greatness of ancient Rome, and when that foundation was sapped, the period of her decadence began.

### SINHALESE.

*Paper-Setter*—REV. SAUGATA SUGATA KANTI.

*Examiner*—REV. P. SEELANANDA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1 (a) Paraphrase the following verses :—

10

ආතත් නැතත් පරලොව සුදනෙති මහ න  
 හලොත් යෙනෙකි පවිකම් නො තබාමැති න  
 නැකොත් එපරලොව ඉක්වන අවැඩ නැ ත  
 අතොත් නැතැයි පවිකල හට වෙයි විප ත.

කුරිරු ගොර සපුන්ගේ දල'ගෙහි විස ය  
 මදුරු මැහි කැලන්ගේ තුඩගෙහි විස ය  
 රුදුරු නුහු සුවන්ගේ වලගෙහි විස ය  
 නපුරු දුදනන්ගේ සියලගෙහිමැ විස ය.

(b) Who is the author of *Subhāsita*?

4

(c) Paraphrase this and write short notes on the underlined words :— 10

තුන් ලොනමා නතුකල රවුළු සොහොවු රු  
තුන් කල් බලා රමිඳු ව වූ ඉවු මිතු රු  
තුන් වේ ආදුරු පුලනිසි කලමිණිමිතු රු  
තුන් විවෙකා මා වද එසුරිඳුපා තඹු රු.

2. Translate the following sentences into English :— 10

(a) එකල්ලි රජ “ඉතා මැනවැ” යි ගිවිසගෙන ගොවිකම් කටුරිසනට බිඳුබත් හදලූ කුති සිවැල් දින. වෙණෙඳුම ක්වරියනට බඩුමල දින. තමා සාමිවැරිය රියනට ඔවුන් ඔවුන් තුබූ පරිද්දෙන් නිමද දිවෙල් තනතුරු ගමිනියම් දින.

(b) එ මිනිස්සු තමතමන්ගේ කමිහි යෙදුනාහු රුපුගේ රට නොපැළඳහ. රජහට බනබාණයෝ රැස් වූහ. මිනිස්සු සොරුන් නැතිවන බැවින් භය නැතිව සතුටුව දරුවන් ලමැඩියෙහි නටවමින් දෙර නො පියාලා නිසැකව වෙසෙහි.

3. Who was Kuṭadanta, and how did he become the disciple of the Buddha? 25

4. Translate the following into Sinhalese :— 16

(a) Yasodharā did not come out to greet the Lord. She remained in her chamber, for she said, ‘If he still loves me he will come to me.’ Throughout the seven years that the Lord had been away, his faithful wife had mourned for him. When she heard he ate mean food, she did the same. She dressed in the simplest robes, she wore no ornaments, and shaved her head after the manner of the priest.

(b) At that time the whole world was filled with happiness. The clouds in the sky passed away, the sunbeams became very bright, beautiful music sounded in the air.

5. Write an essay in Sinhalese on any one of the following subjects :— 20

- (a) මහානමා ගානි. (b) Colombo life.  
(c) Cultivation and its usefulness. (d) සමිති.

6. Write a few lines on Ummagga Jātaka. 4



## PORTUGUESE

*Paper-Setter and Examiner—DR. P. D. BRAGANCA CUNHA.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Give in Portuguese the meaning of the following verses : - 20

E a sciencia erguendo ao espaco  
Os claros olhos profundos.  
C'oa exactiao. do compasso  
Mede as orbitas dos mundos.

Rasga com milhoes de raios.  
Fura com milhoes de sondas  
Os campos verdes pastados  
Pelos rebanhos das oncas.

Prevê a hora, o segunco  
Em que o temporal treme  
Ha de tombar sobre o mundo  
Com um ataque epileptico.

Interroga a luz e a treva  
Os vermes e os Prometheus  
Desde Locusta até Eva  
Desde o infusorio até Deus.

2. Give your own idea about Herulano's *Curico*. 25
3. Write a short essay on 'The Romantic School in Portuguese Literature.' 40
4. Write sentences showing the difference between *afim de que* and *afim de antes que* and *antes de*, *sem que* and *sem* 10

## TAMIL

Paper-Setters— { RAO BAHADUR L. K. ANANTHAKRISHNA  
AIYER, B.A., L.T.  
MAHAMAHOPADHYAY VEDANTAVISARAD  
ANANTAKRISHNA SASTRI.

Examiner—MAHAMAHOPADHYAY VEDANTAVISARAD  
ANANTAKRISHNA SASTRI.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. (a) அடியிற் கண்ட சொற்களின் பொருளைக் குறிக்குக. 20

(i) நவெநிலைமை. (ii) ஒழுக்குமுடைமை. (iii) அழுக்காறமை. (iv) வைஃகாமை. (v) பயனிலச் சொல்லாமை. (vi) புறங்கூறமை. (vii) பிறனில் விழியாமை.

(b) இவற்றன் அழுக்காறமைக்குப்பின் வைஃகாமையையும் ஒழுக்கடைமைக்குப்பின் பிறனில் விழியாமையையும் வைக்கக் காரணம் யாது?

2. பதவுரை தெளிவுரைகளுடன் அடியிற் கண்ட குறள்களின் கருத்துரையை விளக்குக :— 20

(a) ஒழுக்கத்தி னெய்துவர் மேன்மை யிழுக்கத்தி  
னெய்துவ ரெய்தாப் பழி.

(b) வசையிலா வண்பயன் குன்று மிசையிலா  
யாககை பொறுத்த நிலம்.

3. அப்பரின் திருகாமங்களையும் அவற்றின் காரணங்களையும் 20  
விளக்கி ஸம்பந்தமுடந்தி னுணக்கொள்கையை எதிர்த்த வரலாற்றைச்  
சுருக்கியெழுதுக.

4. அடியிற் கண்ட கீதிகளினுன்றைத் தழுவி நீண்ட ஓர் விபர 15  
ஸமெழுதுக.

(a) தேச ஊழியமே சிறந்த ஊழியம்

(b) எனகடன பணிசெயது கிடையப்பதே.

5. Translate into Tamil the following passage :—

25

Robert Bruce, King of Scotland, was once in a very dejected mood. He had often tried to achieve the object on which he had set his heart, but without any success. Just as he was thinking of giving

up the attempt, he noticed a spider dropping down with its thread from the ceiling of the room. The king anxiously waited to see what the spider would do. The ceiling was far away and he wondered how it could ever manage to get there. The spider tried to reach the ceiling by going up the thread, but it failed and fell back. Another attempt was made and again it failed. In all it made nine such attempts without any success. The king now thought that it would give up making any further trial, when, to his great surprise, it once more climbed up, and at last succeeded in reaching the roof.

### MALAYALAM

*Paper-Setter and Examiner—MR. C. E. ABRAHAM, M.A., B.D.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. വിജയനഗര സ്വഭാവ വിശേഷങ്ങൾ ഏതെ 15  
ല്ലാം?

അല്ലെങ്കിൽ

രക്താഗ്രസവത്തെ വർണ്ണിക്ക.

2. 'മാതൃവികാഗ്നിമിത്ര'ത്തിൽ നിന്ന് താഴെപ്പറയുന്ന 15  
വിഷയങ്ങളെക്കുറിച്ച് ഏതു പഠിക്കാം?

(a) രാജധർമ്മം.

(b) ദാതുധർമ്മം.

(c) ജീവിതത്തിൽ വിനോദങ്ങളുടെ സ്ഥാനം.

അല്ലെങ്കിൽ

താഴെക്കാണുന്ന ആരെങ്കിലും ഒന്തളുടെ സ്വഭാവം  
നിരൂപണം ചെയ്യുക:—

(a) മാതൃവിക.

(b) ലീല.

(c) ദേവമണി.

3. Give a free translation of the following passage into Malayalam : 15

Self-control is only courage under another form. It may most be regarded as the primary essence of character. It is in virtue 'this quality that Shakespeare defines man as a being 'looking before and after.' It forms the chief distinction between man and mere animal; and indeed, there can be no true manhood without . In the Bible praise is given, not to the strong man who 'taketh city,' but to the stronger man who 'ruleth his own spirit.' This stronger man is he who, by discipline, exercises a constant control over his thoughts, his speech, and his acts.

4. Write an essay in Malayalam on one of the following subjects :— 40

- (a) Pleasures of reading.  
(b) Agricultural improvements most needed in India.  
(c) A place of pilgrimage in Malabar.  
(d) Marriage customs of Nairs, Nambudiris, or Syrian Christians of Malabar.  
(e) An ideal village or town.

5. Either, Discuss the question as to who the real heroine of 'alavikagnimitram' is. 15

Or, Write what you know of any two of the following :—

- (a) കളമൻ, (b) ഗുണസുന്ദരി, (c) ടാപ്പാൽ,  
(d) കുളികവനം, (e) ഔഷധയോഗിനി

### TELUGU

Super-Setters— { Mr. B. RAMCHANDRA RAU, M.A.  
                              { Prof. S. RADHAKRISHNAN, M.A., D.LITT.  
Examiner—Mr. R. C. RAU, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. సరసారాయణలయొక్క పృథ్వింతము విపులముగా వ్రాయుడు. 10
2. "నీతి" యననేమి. మహాభారతముయొక్క నీతులుదాహరించి వ్రాయుడు. 20
3. ప్రస్తుత సంఘముయొక్క దురాచారములెవ్వయో అవియెట్లు మార్పుచేయగలయో విశదముగా వ్రాయుడు. 10
4. ఈ దిగువ ప్రాసిన పద్యమునకు తాత్పర్యము వ్రాయుడు:— 10

సంతతమైన సర్వశుభ సంపదగల్గియు దానికిందగఁ  
సంతతిలేమి జేసెయది సర్వము హేయముగా దలంచి ని-  
ష్పాతుడనై భృతిం దవము నేయగ వచ్చితి బుత్రిజన్మమై  
సంతనయేను మీదయ గృతార్థత లుండును నన్ననీశ్వరా

5. Translate the following passage into idiomatic Telugu :—

20

In social matters the wife has a better voice, and social success is chiefly due to her. It is she who makes or mars a social function. The husband had at one time to do all the inviting, but now-a-days he has practically become a back number in this respect. It is the woman who gets up all socials and parties, and who extends her invitation to high and low. It is impossible that a social function should become a success if the wife does not like or sulks about it. But the function may go on merrily as ever if the unchivalrous husband finds no time or has no patience with his wife's frivolities or whims and fancies. A clever and pretty woman is a great asset to her husband in his social or material advancement. She can get people in high places to her parties, and when she goes to other people's parties she can make friends with people of wealth and power who may be of some use to her husband. Apart from material gain a wife who is admired by the high and mighty is a very desirable person, and is a pleasure in herself.

6. Write a short essay in Telugu on 'Society in the East,' making use of the following headings as hints for your essay-writing :—

30

- (a) Festivals.
- (b) Religious and social events.
- (c) Economic relations.
- (d) Education and work.
- (e) Women and their place in society.
- (f) Social service.

### GUJARATHI

*Paper-Setter*—PROF. I. J. S. TARAPOREWALA, B.A., PH.D.

*Examiner*—PANDIT HARGOBIND DAS SETHI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

(જવાબો ગુજરાતીમાં લખવા.)

1. નીચે આપેલા વિષયો પૈકી એક પર એક નિબંધ લખો : 20

(ક) પિતૃ ભક્તિ.

(ખ) ઉદ્યોગ થીન લક્ષ્મી મળે છે.

(ગ) લઈયા પલુ ગઈયા નહિ.

2. નીચલાનો ગુજરાતી અનુવાદ કરો : 20

(a) A descent of three miles and a climb of 3,000 feet in two miles brought us to the village of Rhenock. Here a welcome scene met the eye. Preparations for the coolies' tea were going forward on an ample scale, and our party were not disappointed in their expectation that similar facilities would be offered for our own refreshments.

The cook respectfully conducted us upstairs to the verandah of the Post-Office, where the Post-Master's best table and finest chairs were put at our disposal. His assistant was dispatched for milk, and in a short time we were entertained to a delicious meal of tea and biscuits and butter and fruit.

(b) Contentment and cheerfulness are two twins. We should always be satisfied with our lot. Let us look to our poor brethren who are homeless and sleep on foot-paths, when we become discontented to see some of our friends whirling by in motors and living in palaces. A poor man was very discontented, and cursed his fate because he had no money to buy a new pair of shoes every year. One day he saw in a mosque a rich man with both his legs cut off. The poor man raised his eyes towards the sky and thanked Allah for having given him feet to walk with.

3. “કરણુ ઘેલા પર જે જે આંદૂતો વરસી તે તેનાંજ કમોનાં કુળરૂપે 15  
હતી.” આનુ સમર્થન અથવા ખંડન કરો.

4. નર્મદા શંકરનું કોઈ એક કાવ્ય લઈ તેનાં સાર આપો. 10

5. “હલદીવાટનું યુદ્ધ” એ કાવ્યની ખુબીઓનું કાંઈક વિવેચન કરો. 15

6. નીચલાં પર દુક વિવેચન કરો : 10

(ક) અન્યનું તો એક વાંદું આપનાં અઢાર છે.

(ખ) જ્યોષ્ઠનું તે મારતું શું એ નથી કમ કુદરતી ?

(ગ) સગાંદીકાં મેં શાહુ આલમનાં લીખમાંગતાં શેરીએ.

(ઘ) તે રંગ થયી પણ અધિક સરસ રંગ થારો સત્વરે, માત.

(ઙ) પળ પળ અમ ઉર નિધિએશી હા ઉછળે ભર્મિ અરોષ ?

7. નીચલાં દૂકરાનો સાર સંક્ષેપમાં લખો : 10

નરસિંહ મહેતાએ કોઈ ધર્મ ગુણનો પંથ પાડ્યો નથી કે પોતાનો પંથ ચાલાવ્યો નથી પણ માત્ર શ્રી કૃષ્ણ ને નામે ઈશ્વરની લીલા ગાઈ છે. નરસિંહના કાવ્યોમાં કૃષ્ણના અવતારનું મહત્ત્વ સ્વીકારેલું છે, પણ તેમની કવિતાનો મર્મ સમજીએ તો એમના દૃઢ્યમાંજ એથી પણ કાંઈ મોટીજ વાતો રતી રહી હતી. જેને નરસિંહ કૃષ્ણને નામે બળે છે તે ખંડેલોતાં નિરાશ્વર અને નિરંજન એવો એક ઈશ્વરજ છે. એજ અખિલ પ્રજાંડમાં એક પુરુષ છે, અને ખાદીની સૃષ્ટિ એનીજ સૃષ્ટિ છે. સર્વચાપી ઈશ્વર એ સૃષ્ટિમાં સૌમાં વ્યાપી રહ્યો છે. એજ એમનાં સઘળાં પદોની મતલબ છે.

## KANARESE.

*Paper-Setter and Examiner—MR. P. APPAJI RAO, B.Sc.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any *two* of the following passages into Kanarese :—

40

(a) The celebrated Chandni Chauk, the main thoroughfare of Delhi, is one of the most striking and picturesque streets in all India. It is nearly a mile long and seventy-four feet broad. Down the middle runs the old aqueduct now used as a footpath, shaded by a double avenue of nim and pipal trees. It is lined on both sides with the shops and handsome dwelling houses of merchants, whose touts (*Dalāls*) are the scourge of Delhi, swooping down upon every stranger like swarms of flies, pestering him to come and see their wares, cramming cards and circulars into his unwilling hands, screaming in the same breath the praises of their own shops and the most terrible slanders of their opponents. These pests wake you in the morning, hang about you at breakfast, swarm round the hotel doors and verandahs, ride on the steps of your carriage, take short cuts and come upon you unawares when you fondly hope you have got rid of them at last, and finally assemble at the Railway Station to curse you when you leave.

(b) A certain person used every day to buy six loaves of bread. One day one of his friends asked him, saying, 'What dost thou do with the six loaves every day?' That person replied to him thus: 'I keep a loaf of bread for myself, and I throw away a loaf, and I give back two loaves, and the other two loaves I lend.' His friend said: 'I don't understand at all what thou hast said; explain more clearly.' That person said in reply: 'the loaf which I keep for myself, I eat and that which I throw away I give to my mother-in-law; and those two loaves, which I give back, I give to my father and mother in exchange for those which they gave to me in my childhood; and those two loaves which I lend, I give to my two sons in order that they may give me a return in my old age.'

(c) The methods of the workers are still more or less primitive; the average cooly prefers to fill his tub in the easiest and quickest way that suggests itself to him, quite irrespective of whether the results of his want of method may be fatal to himself or others. One of the most frequent causes of fatal accidents is the practice of what is called 'robbing pillars,' the miner surreptitiously hacking at the pillar and filling a few baskets on his way to his appointed place, where the same amount of effort will result in a very much smaller outturn in coal. Apart from this cause of accident and accidents due to other forms of sheer carelessness on the part of the labourers above and below ground, accidents are few, though the death-rate figures for recent years show that there is a tendency to an increase in this respect.

2. Write an essay on any *one* of the following subjects in Kanarese only :—

20

(a) A little learning is a dang'rous thing.  
Drink deep or taste not the Pierian spring.

(b) *Rāmāyana*, *Mahābhārata*, and other Puranic stores enable one to foretell the incidents that are likely to occur in one's life-history when one is placed under difficulties or under favourable circumstances.

- (c) Talkies.  
 (d) Raghuvamsa.
3. Describe Hidimbe's destruction by Bhimasena. 15  
 4. Babhruvahana's magnanimity and self-sacrifice is soul- 15  
 stirring. Explain this.  
 5. Write short sentences illustrating the use of the following 10  
 words and phrases :—

- (a) ತಿರುಳು. (b) ಉಪಸಂಹಾರ.  
 (c) ಉಪಸ್ವಂಭಕ ವಾಕ್ಯಗಳು. (d) ನುತ ಶಬ್ದ ಲಂಕಾರದೊಳು.  
 (e) ಹೃದಯಾರವಿಂದ. (f) ತಿಮಿ ತಿಮಿಂಗಿಲ.

### MODERN TIBETAN

*Paper-Setter*—MR. SATKARI MUKHERJEE.

*Examiner*—MR. KARMA SAMDON PAUL.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate the following passage into modern Tibetan :—

40

But King Suddhodana did not rejoice in Kāladevala's prediction. On the contrary, he tried by all means in his power to prevent its fulfilment, for he desired that Prince Siddhārtha should one day become a universal monarch. The Brahmans had told him that the sight of human suffering and earthly impermanence would induce the prince to abandon the world. Therefore, the king kept away from the prince everything that could give him knowledge of human misery and death. He surrounded him with enjoyments and kingly splendour of every kind, so as to chain him firmly to a worldly life. The most distinguished teachers had to instruct him in the arts and sciences, and in all kingly accomplishments befitting a king's son. When Prince Siddhārtha reached manhood, his father had built for him three palaces, one for each of the three Indian seasons—the hot, the cold, and the rainy season. All were furnished with the greatest luxury: all around them spread vast gardens and groves, with clear ponds full of lotus flowers, and grottoes, and beds of the most beautiful flowers. In these gardens and groves the Prince passed his youth, but he was never allowed to leave them; and all the poor, the sick, and the old, were prohibited from entering. Sons of the noblest families in the land were his companions. In his sixteenth year his father married him to the Princess Yaśodharā, and he was surrounded besides by a bevy of beautiful girls, skilled in dancing, singing, and music, according to the then custom of Indian Princes.

It became possible for the prince, however, in the midst of all this splendour and delight, to think of flight from the world.

2. Give a brief sketch of the life of Prince Drimekunden and the moral lessons you gather from his character.

15



3. Explain the underlying idea of the following extracts in your own language, and show the context in which they occur :— 10

མེད་སྐུ་བཅེངས་པའི་ཞོ་ལ་སྒྲིང་བོ་མེད།

སྒྲིང་གསུམ་ཞོ་ལ་དབང་བའི་ཀླུ་པོ་ཡང་།

འཇིག་རྟེན་འདི་ནས་པ་རེལ་འགྲོ་བའི་ཆོ།

ཞོ་མེད་ལག་པ་སྒྲིང་བར་འགྲོ་དགོས་པས།

4. Correct the errors in the following :—

5

ང་ཀླུ་པོ་འདི་རྒྱ་ན་མོར་གཏོར་བགོས་པས། ཞོ་ཆེན་རྣམས་གྱི་གྲུས་སོང་ས་

ཟེར་ཅིག།

5. Write an essay on any one of the following subjects :—

30

(a) Knowledge is power.

(b) Punctuality.

(c) The principal trades of Tibet and its neighbouring districts.

### ALTERNATIVE PAPER IN ENGLISH

Paper-Setters— { Mr. W. C. WORDSWORTH, M.A.  
                          ,, HIRANKUMAR BANERJEE, M.A.

Examiner—REV. FATHER J. WEAVER, S.J.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Either, Compare Browning's picture of the lover of art in *Fra Lippo Lippi* with Tennyson's in *The Palace of Art*, and state what you conceive to be the aim and purpose of each poem. 18

Or, State in what respects Tennyson's poems dealing with love present a contrast to those of Browning? Illustrate by references to their poems how the ideals of love of the two poets are different.

2. Relate either the story of Elaine's death as Tennyson tells it or the story told in Browning's *Statue and the Bust*. 16

3. Explain any two of the following :— 16

- (a) Self-reverence, self-knowledge, self-control,  
These three alone lead life to sovereign power.  
Yet not for power (power of herself  
Would come uncall'd for), but to live by law,  
Acting the law we live by without fear;  
And, because right is right, to follow right  
Were wisdom in the scorn of consequence.

- (b) But pamper not a hasty time,  
Nor feed with crude imaginings  
The herd, wild hearts and feeble wings  
That every sophister can lime.  
Deliver not the tasks of night  
To weakness, neither hide the ray  
From those, not blind, who wait for day,  
Though sitting girt, with doubtful light.
- (c) Well, less is more Lucrozio : I am indeed  
There burns a truer light of God in them,  
In their vexed beating stuffed and stopp'd up brain,  
Heart, or whate'er else, than goes on to prompt  
This low-pul'd 'orthright craftsman's hand of mine.
- (d) So, let him wait God's instant men call years;  
Meantime hold hard by truth and his great soul  
Do out the duty ! Through such souls alone  
God stooping shows sufficient of His light  
For us i' the dark to rise by.

4. Either, Name two of the most famous among the friends and acquaintances of Goldsmith and state briefly what you know of them and of their relations with the poet. 16

Or, Write short notes on any four of the following :—*The Bee*, *Beni Nash*, *James Boswell*, *The Deserted Village*, *Tony Lumpkin*, *Retaliation*.

5. Relate the story of the publication of *The Vicar of Wakefield*. What does Black tell us about the reception given to the novel on its appearance? 10

6. Explain any three of the following passages :— 18

(a) When we are invited to contemplate the 'evil destinies of men of letters,' we ought to be hospitable as well as the ebb-tides.

(b) Johnson, Goldsmith, and all the rest of them are only ghosts until the pertinacious young laird of Auchinleck comes on the scene to give them colour, and life, and form.

(c) Goldsmith, whether in writing a novel or a play, was more anxious to represent human nature than to prune a plot, and paid but little respect to the unities, if only he could arouse our interest.

(d) When Johnson heard that Foote meant to 'take him off,' he turned to Davies and asked him what was the common price of an oak stick; but an oak stick in Johnson's hands, and an oak stick in Goldsmith's hands, were two different things.

## SANSKRIT

### FIRST PAPER

Paper-Setters— { DR. BHAGABATKUMAR SASTRI, M.A., Ph.D.  
MR. MURALIDHAR BANERJEE, M.A.  
„ NILMANI CHAKRABARTI, M.A.

**Head Examiner**—MAHAMAHOPADHYAY DR. BHAGABATKUMAR SASTRI, M.A., PH.D.

<b>Examiners—</b>	MR. PHANIBIHUSHAN CHATTERJEE, M.A.
	„ SURENDRANATH BHATTACHARYYA, M.A.
	„ JYOTISHCHANDRA GHATAK, M.A.
	„ HARILAL CHATTERJEE, M.A.
	„ GIRINDRANARAYAN MALLIK, M.A.
	„ SIBADAS BANERJEE, M.A.
	„ ATULCHANDRA BANERJEE, M.A.
	„ JATINDRANATH BHATTACHARYYA, M.A.
	„ RAMSARAN GHOSH, M.A.
	„ BHOLANATH CHATTERJEE, M.A.
	„ HARIPADA SENGUPTA, M.A.
	DR. SUDHENDUKUMAR DAS, M.A., PH.D.
	MR. AKSHAYKUMAR BHATTACHARYYA, M.A.
	„ SADANANDA BHADURI, M.A.
	„ BEPINBIHARI GUHA.
	„ BHABARIBHUTI BHATTACHARYYA, M.A.
	„ DINESCHANDRA BHATTACHARYYA, M.A.
	„ ATULCHANDRA DASGUPTA, M.A.
	(Looked over answer-papers written in Devanagari character.)
	MR. BASANTAKUMAR CHATTERJEE, M.A.
	(Looked over answer-papers written in Uriya character.)
	MR. PRIYARANJAN SEN, M.A.
	(Looked over answer-papers written in Telugu character.)
	MAHAMAHOPADHYAY VEDANTAKISARAD ANANTA-KRISHNA SASTRI.
	(Looked over answer-papers written in Marathi character.)
	( MAHAMAHOPADHYAY PANDIT SITARAM SASTRI.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

I. Translate into English two verses from Group A, one from 5 × 5 Group B, and two from Group C :— =25

#### GROUP A

- (a) कथावपूतानि दिग्दर्शयि कृत्वा दिग्दर्शने निवर्तयामि मनुम् ।  
प्रत्यक्षेण पञ्चवराकृताया प्रभा पतङ्गस्य मृनेष धेनुः ॥

- (b) न पाटलायां गवि तस्थिवांसं धनुर्धरः केशरिणं ददशे ।  
अधिन्यकायामिव धातुमन्यां लोभद्रुमं सानुमतः प्रफुल्लम् ॥
- (c) तस्यालमेघा क्षुधितस्य हस्तौ प्रदिष्टकाला परमेष्ठरेण ।  
उपस्थिता शोणितपारणा मे सुरद्विषस्यान्द्रमसौ सुधेव ॥

## GROUP B

- (a) द्यावापृथिव्योरिदमन्तरं हि व्याप्तं त्वदेकेन दिशश्च सर्वाः ।  
दृष्ट्वाङ्गुतं रूपमुयं तवेदं लोकवयं प्रव्यथितं महात्मन् ॥
- (b) कस्याश्च ते न नमस्कृत्यात्मन् गरायसे ब्रह्मणोऽप्यादिकर्वे ।  
अनन्त देवेश जगन्निवास त्वमन्तरं सदसत्तत्परं यत् ॥
- (c) तस्मात् प्रणम्य प्रणिपाद्य कायं प्रसादये त्वमहमीशमीश्वर ।  
पतिव पुत्रस्य मखेव सख्युः प्रियः प्रियायार्हसि देव सोढुम् ॥

## GROUP C

- (a) दत्तावधानं मधुलिङ्गीतौ प्रशान्तचेष्टं हरिणं जिघांसुः ।  
आकर्णयन्नस्तु कङ्कसनादान् लल्ये समाधिं न दधे मगावित् ॥
- (b) न तज्जलं यन्न सुचारुपङ्कजं न पङ्कजं तद्यदलोमषट्पदम् ।  
न षट्पदोऽसौ न जगुश्च यः कलं न गुञ्जितं तन्न जहार यन्मनः ॥
- (c) न विप्रदर्शं कृतघातयन्ना यान्तं वनं रात्रिचरो इन्द्री ।  
जिघांसुवेदं धृतभासुरास्त्रका ताडकाख्यां निजघान रामः ॥
- (d) निर्माणदक्षस्य समीहितेषु सौमिव पद्मासनकौशलस्य ।  
ऊर्ध्वस्फुरद्गगमस्तिभिर्या स्थितावदस्येव पुरं मघोनः ॥

2. (a) Give in simple Sanskrit prose the full meaning either of (a) in Group A, or of (c) in Group B, or of (b) in Group C, or of (d) in Group C.

(b) Either, Note in English or Sanskrit the main points in the conversation either between Dilipa and the Lion in *Raghu*, Canto II, or between Visvanitra and Dasaratha in *Bhāṭṭi*, Canto I.

Or, Quote from memory the verses in Canto II, of *Bhāṭṭi* about the charming manners of the milkwomen.

Or, Write in Sanskrit the substance of the encouraging words addressed by the Lord to Arjuna in *Gītā*, Canto XI.

3. (a) Either, Show the grammatical connexion of हस्तौ in Group A, verse (c), accounting for the चतुर्थी.

Or, Explain the grammatical construction in विप्रदर्शं कृतघातयन्ना in Group C, verse (c).

(b) Account for the आत्मनेपद either in प्रचक्षमे in Group A, verse (a), or in दधे in Group C, verse (a) or in नमस्कृतम् in Group B, verse (b).

(c) Account for the case-endings in निजघान or परमेष्ठरेण in Group A, in ते or त्वाम् in Group B, in हरिचम् or कलम् or गगमस्तिभिः in Group C.

(d) Comment grammatically on the form *either* यावाहयिष्योः or ३  
खगावित्.

(e) Derive तस्थिवांसम् or प्रफुल्लम्, and चान्द्रमसी or गरीयसी, and  
सौदम् or रात्रिचनी.

4. Frame sentences of your own to illustrate the uses of—

- (a) वि + जि or उप + यम् in लुङ् or लिट् ; 3  
(b) शृन् or राजन् in the singular in सप्तमी to indicate disregard ; 3  
(c) मन्थे with a word in चतुर्थी or ज्ञा with a word in षष्ठी ; 3  
(d) a तद्धित form to mean तेन तुल्यम् or तस्य कर्म ; 3  
(e) the resulting compound from सु (शोभनी) राजा यस्मिन् देशे सः or 3

ऊ (कुक्षितम् चक्षम्).

5. Make the necessary corrections in any five of the following :- 5 × 2 = 10

- (a) गुरुयमागत इमं प्रणम ।  
(b) सतानां स्वधा मुदकदानं कार्यम् ।  
(c) अस्ति मम एका मेषा, एका च अश्वी ।  
(d) खनिका खलु सा नारी ।  
(e) सन्ति ब्रह्मणश्चतुर्मुखानि ।  
(f) उक्त्वाय त्वरस्व ।  
(g) पित्रे शपति पुत्रः ।  
(h) विरमस्व पापात् ।  
(i) यशोवानतं कविः ।  
(j) लक्ष्मामन्तं सेवित ।

6. Translate into Sanskrit :—

(a) Accompanied by his brother and wife, the prince entered the great forest. It was fearful all around. Ferocious animals were roaming there at large. Man-eating monsters were wandering hither and thither. They were no respecters of persons. They would devour even ascetics who crossed their path. No wonder the forest was looked at with alarm and dismay by everybody who came near it. It was practically the land of the monsters.

15

(b) Always make good use of your time; never entertain the thought in your mind that you are particularly unlucky; fortune always favours the brave; those who have no manliness in them complain of bad luck; with patience and perseverance you will be able to surmount all difficulties in life.

10

## SECOND PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any *three* of the following extracts :—  $5 \times 3 = 15$

(a) नोवाहमेतद् यश्चै ददानि, न चार्थहेतोर्न च भोगदृष्टया ।

पापैरनासित एष मार्गः इत्येवमेतत् सकलं करामि ॥

(b) तं त्वेणकुणकं रूपं खोतसानूह मानमभिवीक्ष्य राजर्षिभरत आदाय स्वत-  
मातरमित्याश्रमपदमनयत् । तस्य हवा एणकुणक एतस्मिन् जननिजाभिमानस्याहरह-  
स्त्यापणानुधानेनात्मानग्रसाः सर्व एवोदबभूव ।

(c) एवं गच्छति कालि कदाचिद्राजा क्षीणभूयिष्ठार्या रजन्या स्वप्ने विलासवत्या  
आनने सकलकलापरिपूर्णमण्डलं शशिनं प्रविशन्तमद्राक्षत् । प्रबुद्धयोत्याय तस्मिन्नेव  
क्षणे समाह्वय शुकनासाय त स्वप्नमकथयत् ।

(d) राजनन्दन, केचिदस्यामटव्यां विद्याभ्यासमपह्नाय दरीकृत्य निजकुलाचारं  
पुलिन्दपरागमा ब्राह्मणव्रजा निवसन्ति । तेषु कस्यचित् पचा मातङ्गनामाऽहं सह  
किरातबलीन जनपदं प्रविश्य धनिन आनोयाटव्यामपहरन्त्या धनं वीतदयो व्यचरम् ।

(e) निचं शुचिः स्यात् । विधा च शौचम्—वाक्शौचम् मनःशौचम् कायशौ च ।  
प्रथमे शास्त्रगम्यनी । तार्तीयिकं तं मनस्वच्छेदी पादौ, सताम्बूलं मुखम्, सविलेपनमात्रं  
वपुः, महाहंसनल्लवणं च वासः, सक्तुसुप्तं शिर इति । शुचि शौचनं हि सरस्वत्याः  
संवर्गनमासमन्ति ।

2. *Either*, Give in your own words, in English or in Sanskrit, as briefly as possible, the story of Bharata, and point out the moral of the story. 8

*Or*, Explain fully in English or Sanskrit, the superiority of Bibi over Ashtaka, Pratardana, Vasumanas, and even Narada.

3. Explain the grammatical forms in any *three* of the following,  $3 \times 3 = 9$  with necessary comments :—

(a) स्वतमातरम् in Question 1 (b). (Why न क ?)

(b) अहरहः in Question 1 (b). (What विभक्ति and why ? Why doubled ?)

(c) समाह्वय . . . शुकनासाय . . . अकथयत् in Question 1 (c). (Why चतुर्थी and not तृतीया ?)

(d) ब्राह्मणव्रजा in Question 1 (d). (How derived and in what sense ?)

(e) तार्तीयिकम् in Question 1 (e). (How derived and in what sense ?)

4. Construct short sentences to illustrate any *five* of the  $5 \times 3 = 15$  following :—

(a) लुङ् in connexion with माङ्.

(b) विश्व in the sense of all, in the plural in वही, or प्रवसा in the an ṣaouline.

- (c) विञ्चति in the plural number.  
 (d) *Ātmanepada* of नी under कर्त्तृ स्थ चाशरीरे कर्त्तृणि.  
 (e) प्रवृत्ति in the sense of आरभ्य with a word denoting time.  
 (f) वि + शी with its locative (अधिकरण).  
 (g) The suffix अनीय in अधिकरणवाच्य or सम्प्रदानवाच्य.  
 (h) वि + लोक् as compounded in समाहार.  
 (i) The resulting तद्धित form from कषायिष्य रक्तम्.  
 (j) अरय्य in the feminine form in the appropriate sense.
5. Translate into English any *three* of the following :—

10×3  
=30

(a) एकशौरः प्राह—सखे सर्व्वतो नगररक्षकाः परिभ्रमन्ति । सर्व्वोऽपि जागरिष्यति तेषां भरोपटहादोनां ननादेन तस्मादाहतं विभव्य स्वस्वभागागतं धनमादाय शौत्रमेव गन्तव्यम् । अन्यः प्राह—सखे त्वमनेन कीटिद्वयपरिमितेन सुवर्ण-जातेन किं करिष्यसि ? प्रथमं प्राह—विदुषे ब्राह्मणाय प्रदास्ये ।

(b) कदाचिद्देवमभाषां पुरन्दरो नारदं पृच्छति—सुने, भूलोक इदानीं का नाम वाता ? नारदः प्राह—सुरनाथ, न किमप्यार्य्यम् । किंतु धारानगरवासो श्रीभाजभूपालो रोगपाडिता नितरामस्वस्थो वर्त्तते । स तस्य रोगः केनापि न निवारितः । तदनेन भाजनृपालेन भिषग्बरा अप खदेशान्निष्काशिताः ।

(c) ततः शरदागमे दिशो निर्मलाः, नभा मेघावरणमुक्तम्, पन्यानः सर्व्वे पङ्कजीना अभवन् । सीताया अन्वेषणाय कालोऽयं सर्व्वथा समुपयोगाति ज्ञाना सुगन्धः सर्व्वेषु दिविभागेषु वानरबलानि प्रेषयामास । रावणस्य राजधानी दक्षिणस्यां दिशि वर्त्तते इति महाबलं तीक्ष्णबुद्धिं हनुमन्तं तत्र प्रयातुमादिदेश ।

(d) रामानुमथा लङ्काराज्ये विभीषण एवाभिषिक्तो बभूव । कपयो राक्षसाश्च कति दिनानि तावदुत्सवमग्रा आसन् । अथ रघुपतिरयाध्यागमनाय समुत्सको विभीषणाय स्वमभिप्रायं कथयामास । विभीषणोऽपि स्वपरिजनेः सह तत्र गन्तुमिष्ये । रामश्च तदनुमेने । ततः पुण्ये सुहर्षे सर्व्वे ते पुरोमयोध्यां प्रतस्थिरे ।

(e) अथ वायमः समेय तानाह—अहो ! किं महाजनसमागमोऽयं परम-महोत्सवश्च ? ते प्रोचुः—भा नास्ति कश्चिद्दृष्टमानां राजा तदनुकस्यास्य विद्वत्-राज्याभिषेको निरूपितस्तिष्ठति समस्तपक्षिभिः । तत् त्वमपि स्वमतं देहि । अथासौ काको विहस्याह—अहो न युक्तमिदम् । मयूरहंसादिषु विद्यमानेषु दिवन्वस्य पेषका-स्याभिषेकः क्रियते ?

6. (a) Translate into Sanskrit any *two* of the following :—

7½×2  
=15

(i) The night was dark; distant thunder roared; rain fell in torrents; every step was dangerous; but the traveller heeded nothing.

(ii) The storm gathered in strength trees were uprooted on all sides; his path was blocked; no advance was possible; still he was undaunted.

(iii) What was the secret of this first resolve? He was surely moved by a great force. Was it his superhuman physical strength? No, it was some divine power. Nothing else could have moved him in such circumstances.

(b) Translate into Sanskrit any *two* of the following :— 5 × 2  
=10

(i) Study is not to the linking of the student; true; but not to give sole attention to studies is to court ruin.

(ii) If you are on the right path, God is with you in your struggle. You have nothing to fear with God to guide you.

(iii) Good nature and good sense must ever join,  
To err is human, to forgive divine.

### PALI.

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DR. PRABODHCHANDRA BAGCHI, M.A., D.LIT.  
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,, MUKUNDABIHARI MALLIK, M.A.

### FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Summarise the conversation between Buddha and Māra 10  
as given in the *Padhāna Sutta*.

*Or*, Explain fully what Buddha meant by the following stanza :—

Uṣabho-r-iva chetvā bandhanāni  
nāgo pūtilataṃ va dālayitvā  
nahaṃ puna upes-am gabbhaseyyaṃ  
atha ce patthayaṣi pavassa deva.

2. *Either*, Give a brief account of the lives of two of the following persons : (a) *Maḷapajayati* Gotami, (b) *Mahākassapa*, (c) *Vijaya*, (d) *Buddhaghosa*. 6

*Or*, Show that the whole teaching of Buddhism is given in the following stanza :—

Dukkham dukkhasam upādāy dukkhasa ca ariyam,  
ariyaṃ ca aṭṭhaṅgikam maggam dukkhe paṇaṇāsaṃ.

3. Translate into English any *three* of the following extracts, adding notes on the italicized words : 24

(a) Kin te jaṭāhi dummedha, kin te *ajinasāṭṭhā*,

abbhantaram te gahanam, bhāhiram parimajjasi

(b) Manujassa pamattacārino taṇhā vaḍḍhati māluvā viya,

so palavati hurāburam phalam iccham va varasmi vānuso.

Yam esā sahati jammi taṇhā loke visattika



- (e) Yo koci samaṇo cāpi brāhmaṇo ca bahussuto  
parappavāḍakusalo vālavedhi samāgato  
na sakkā paṭivattetaṃ Sineru va suppatiṭṭhito.  
Devo Māro vā Brahmā ca ye keci paṭhaviṭṭhita  
na passanti apumantaṃ kiñci dubbhāsitaṃ padaṃ.
- (d) Parivattesi sabbā pi *Sihalatthakathā* tadā  
saḷhesaṃ mūlabhāsāyā Māgadhiyā ni uttariyā.  
Satiānaṃ sabbabhāsānaṃ sā abo-i hitāvahā,  
theriyācariyā sabbe Pāliya viya tam aggahutaṃ.
- (e) Diṭṭho hi me so Bhagavā, antimo 'yam samussayo  
vikkhīno jātisaṃsāro, n' atthi dāni punabbhavo  
Araddhaviṛiye pahitatte niccaṃ dāḷhaparakkame  
samagge sāvaṇṇa passa, esā Buddhāna vandana.
4. Write explanatory notes on any four of the following :—(a) nib buto gini, (b) sabba saṃkhārā anattā, (c) dhutavāda, (d) paṭsaṃbhi-dā, (e) upadhi, (f) navaṇṇaṃ, and (g) namuci.
5. Either, State the rules for the formation of participles and infinitives in Pāli. 5  
Or, Name the classes into which verbs are divided in Pāli grammar, giving examples.
6. Expound the samāsa in any four of the following :—(a) mahā-bodhisamāpamhi, (b) piṭakattayaṃ, (c) vijjāsippakalāvedī, (d) naddha-paṇḍitodho, (e) pakkodano, and (f) attavetanabhato. 6
7. Conjugate the root kar or ṭhā in the aorist, and the root nī or bhuj in the optative. 5
8. Decline ramaṃ or traṃ, and attā or riṇṇū in all cases and numbers. 5
9. Write grammatical notes on any four of the following :—(a) samāgatā, (b) albahe, (c) santiṃ, (d) upaccagā, (e) anibbisam, and (f) patrā. 4
10. Translate into Pāli any two of the following passages :— 25  
(a) Virtue is the highest good. Men are mortal. Human life is short. Gold and silver cannot make men happy. Summer is warm but winter is cold. The love of glory and the fear of shame are often the cause of great valour.  
(b) The poor woman was dying of hunger and cold. You are always right; I have been wrong. Have pity on my weakness. Many poor people live on bread and potatoes only. The king has granted him pardon.  
(c) He has worked much more for our good than for his own. Calutta is a large city; its streets are dirty. I have a good friend. He often comes to my house. He is a handsome young man. He has a large and beautiful house.

## SECOND PAPER.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate any two of the following passages into English, fully commenting on the italicized words :— 25

(a) Bodhisatto p bhūṭhitvā savanapiṭṭhe pallamkena nisinnā addasa  
tā itthiyo curivahāṇāni avattharivā nidā antiyo ekacca paggharita-  
khejā lālākilinnagā ekacca dante k'ālant'o ekacca kākacchantyo  
ekacca vippalapatiyo ekacca apugatavatthā pākatabhacca-sambhā-

ttāhānā. 'Co tāsam tam vippakāram disvā bhīyyosomattāya kāmesu viratto ahoṣi. Tassa alaṃkata-piṭṭiyatam Sakkabhavana-sadisam pi tam mahātalam vippavidhanānākuṇapabharitam āmakasusānam viya upaṭṭhāsi.

(b) Atha kho Māro pāpinā kassakavaṇṇam abhinimminivā mahantaṃ naṅgalaṃ khandhe karitvā dighaṃ pācānayaṭṭhiṃ gahetvā haṭṭhaṭṭakaso sāṇa-āṭṭhinivattbo kaddamamakkhitehi pādēhi yena Bhagavā ten'upasaṃkamī, upasaṃkamitvā Bhagavantam etad avoca : "api samaṇa balivadde addasā" ti. "Kiṃ pan' pāpima te balivaddehiti." "Mam' eva samaṇa cakkhum' mama rūpā mama cakkhusampha-saviññāṇāyatanam, kuhiṃ me samaṇa gantā'ā uokkhasi.

(c) Atha kho Bhagavā āyasmantaṃ Ānandaṃ āmantesi : "āyām' Ānanda, yena Kusinārā ten'upasaṃkamissāmi" ti. "Evam bhante" ti kho āyasmā Ānando Bhagavato pacassosi :

Cundassa bhattaṃ bhūṭiṃ vā kamūārassā' ti me sutam,  
ābhāṃ samphosā dhiro pabāḷhaṃ māraṇantikaṃ.  
Bhuttassa ca sūkaramaddavena vyādhi ppaḷḷhā udapādi Satthuno,  
virūccamāro Bhagavā avoca : gacchām' ahaṃ Kusinārāṃ nagaran ti.

2. Either, Write explanatory notes on any five of the following :—*sakyaputtiyā samanā, aññatitthiyā, Jetavana, pubbanimittāni, ariyasaccāni, kumārapaṇham, pariyaṭṭi-antaradhānam.*

Or, Comment on the ten precepts pointing out their importance in the disciplinary system of the Buddhists.

3. What is precisely meant when it is said that according to Buddhism either "rebirth is not transmigration," or "there is no Ego?" 10

4. (a) Conjugate the root *nahā* in the optative. 12

(b) Decline the bases of *śā* and *rājan* in the ablative and locative.

(c) Derive—*āruhya, phoṭṭhabbā, bhuñjeyya.*

5. Expound the *saṃāsas* in any four of the following :—*cakkhu-samphassapaccayā, pākāṭabhihacca-sambūḍhaṭṭhūnā, susajjita-āpāṅga-maṇḍalaṃ, kaddamamakkhitehi, uccinnamūlaṃ, gandhatelappadipa.* 8

6. Summarize the story of the "Great Retirement." 10

7. Translate into English any two of the following passages :— 20

(a) Ekam samayaṃ Bhagavā Kosalesu viharati Sundarikāya nadiyā tīre. Tena kho pana samayena Sundarikab' āradvā'jo brāhmaṇo Sundarikāya nadiyā tīre aggiṃ uḥati aggiḥuttam paricarati. Atha kho Sundarikabhāradvā'jo brāhmaṇo aggiṃ uḥitvā aggiḥuttam paricaritvā utṭhāyāsānā samantā cutuddisā nuvilekesi : "ko nu kho imam havyasesam bhuñjeyya ti." Adda-ā kho Sundarikabhāradvā'jo brāhmaṇo kamaṇḍaluṃ gahetvā yena Bhagavā ten'upasaṃkamī.

(b) Tato rājā Asoko Gaṅgāya tīre mahāthūpassa' ādipū'jam kattukāmo Gaṅgāya dūre adḍhayaṇanamutto pāṭidipaṇṇanam kārāpesi. Mahāthūpassa ca sīmantato dipā uppa'jalitā mahā'āno ma'āblikkhu-samho ca sannipatito mahā'ā' upavandanapū'jāya Tato Māro vāta-vuṭṭhiṃ samuṭṭhāpesi padīpe nibbāpetukāmo thūpasū'āya antarāyā' ca kattukāmo. Tasmīṃ khaṇe therō Upagutto vātavuṭṭhiṃ pariggahetvā dūre chaḍḍesi.

(c) Brāhmaṇo Bhagavantam etad avoca : "ahaṃ kho samaṇa kasāmi ca vapāmi ca, kasitvā ca vāpitvā ca bhuñjāmi, tvaṃ pi samaṇa kasassu ca vapassu ca, kasitvā ca vāpitvā ca bhuñjassu" ti. "Ahaṃ pi kho brāhmaṇa kasāmi ca vapāmi ca, kasitvā ca vāpitvā ca bhuñjāmi" ti. "Na kho pana mayam passāma bhoṭo Gotamassa yugam vā naṅgalaṃ vā phālaṃ vā pācānam vā balivadde vā."

## ARABIC.

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## FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any two of the following passages :— 25.

A.

يا بني اسرائيل قد انجيناكم من عدوكم و وعدناكم جانب الطور  
الايمان و نزلنا عليكم المن و السلوى \* كلوا من طيبات ما رزقناكم و لا  
تطغوا فيه فيحل عليكم غضبي \* و من يحلل عليه غضبي فقد هوى \*  
واني لغفار لمن تاب و امن و عمل صالحاً ثم اهتدى \* و ما اعجلك  
عن قومك يا موسى \* قال هم اراء على اثرى \* و عجبت اليك رب  
لترضى \* قال فانا قد فتناك قومك من بعدك و اضلهم السمرى \*  
فرجع موسى الى قومه نصابان اسفاً \* قال يا قوم اسم يعدكم ربكم  
وعداً حسناً \*

B.

قال المدائيني خرج فتيان في صيد لهم فاثاروا ضبعاً - فنفرت و مرت  
فاتبعوها فلجأت الى بدت رجل فتخرج اليهم بالسيف مسللاً فقالوا له يا  
عبد الله لم تمنعنا من صيدنا فقال استجارت بي فغلوا بينها و بينه فغظ  
اليها فاذا هي مهزلة مضرورة فجعل يسقيها اللبن صبراً و مقبلاً حتى  
سمنت و حسنت حالها فبينها هو ذات يوم راقداً ان عدت عليه فشقت  
بطنه و شرب دمه \*

C.

ما ورننت الاباء الابناء خيراً من الادب لانهم به يكسبون المال  
و بالجهل يتلفونه و قال حسن الخلق خير من قرين و الادب خير ميراث  
و التقوى خير زاد و قال ايضاً ليت شعري ابي شئ ادرك من فاته  
الادب و اى شئ فات من ادرك الادب و قال بعضهم الادب مال  
و استعماله كمال بالعقل يصلح كل مر و بالعلم يقطع كل شر و قال  
بزرجمهر من كثر ادبه كثر شرفه و ان كان قبل رضيعاً بعد صيته و ان  
كان خاملاً و ساد و ان كان غريباً و كثرت الحاجة اليه و ان كان فقيراً \*

2. (a) Account for the (نصب) of اسفاً and وعداً حسنأ in extract A, Question 1.) 4

(b) What does وعداً حسنأ allude to? Explain fully. 6

(c) What kind of ضمائر are in ليت شعري - من فاته - 6

in extract C, Question 1? كثرت الحاجة اليه and كثر شرفه - و استعماله

3. Answer any two of the following questions :— 10

(a) Illustrate by a story from your text that the Holy Prophet—peace be on him!—was a protector of orphans and the destitute.

(b) Narrate the story of 'Abdu'llāh, son of 'Abbās, and the desert woman of the Banī Kalb.

(c) Write short notes on any two of the following :—

زمخشري - يعقوب لبث - ابو حنيفة - بزرجمهر

4. Vocalise fully extract B, Question 1. 5

5. Rewrite the following after necessary correction :— 5

اعطيت ابوزيد خمس دنائير - طيارتان يطير على الهواء انظر  
اليهن ذهب احدهما الى كلكتة و سقط الاخرى فى البحر - انظر الى  
ابو موسى لابس قميص سداء يتبعه بنتاً له \*

6. Answer any three of the following questions :— 15

(a) Enumerate, and illustrate by examples, the action

افعال مقاربة of (عمل)

(b) What is استثناء? Give its rules with examples.

(c) Give the مرمي and نريد, ميقات تعليل

(d) What is the difference between أن and إن? Illustrate by examples.

7. Reproduce the story of Hamid Laffāf in your own language, and draw a moral from it. 8

## 8. Translate into Arabic :—

I was just passing by the side of a river. I found a huge carcass floating on the water. Lo! There appeared a big fish and began to swallow it. It had almost swallowed the half of it, when a vulture came down and sat upon the other half of the carcass. Finding its seat gradually disappearing the vulture turned and discovered the fish. It began to strike the fish so severely with its sharp beak, that it vomited it out, and dived down into the water.

## SECOND PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

## 1. Translate into English either A or B :—

## A.

تطلع صبح الشيب و القلب مظلّم  
فما طاف منه من سنى الحق طائف  
لئلا نون عامما قد تزلت كانها  
حلموم تقضت ار بروق خراطف  
و جاء المشيب المنذر المرء انه  
اذا رحلت عنه الشبيبة تالف  
فيا احمد الخوان قد ادبر الصبا  
و نادك من سن الكهولة هاتف  
فهل ارق الطرف الزمان الذى مضى  
و ابكاه ذنب قد تقدم سالف  
فجد بالدموع الحمر حزنا و حسرة  
فدمعك بنبي ان قلبك اسف

## B.

ذهب الذين عليهم وجدي  
و بقيت بعد فراقهم وحدي  
من كل يئذك فى التراب و بينه  
وشبران فهو بغاية البعد

لو بعثرت للخلق اطباق الثرى  
 لم يعرف المولى من العبد  
 من كان لا يطاء التراب برجله  
 يطاء التراب بناعم الخد  
 . . . . .

عجبت لمفتون يخلف بعده  
 لوارثه ما كان يجمع من كسب  
 حورا ماله ثم استهلوا لقبره  
 ببانى بكاء تحته ضحك القلب

2. Answer any three of the following :—

5×3

(a) Give the **باب** of any five of the following :—

=15

استهلوا - حورا - و ابكاه - ارق - و نادك - تقضت - تولت

(b) Account for the **اَعراب** of any five of the following :—

نام - بادى - مفتون - حزنا - المرء - خواطف - عاما

(c) Select any five of the following and state whether they are in the singular or the plural, and write with vowel-signs the opposite number of each of the five selected :—

غاية - طائف - مولى - دمرع - خواطف - زمان - ذنب

(d) Write notes on five of the following seven expressions, explaining their form or usage, or expressing the precise meaning of each word :—

الميسر و المسبب و المسهل و المساعد - عصى عمدا و جهلا  
 و غرة - حاشا لجردك - يمانى - اشعار جارية مجرى المثل -  
 ليس بنافع ذا البخل مال - اما والله ان الظلم لوم \*

8. Write notes on :—

ابن الفارض - معاوية بن ابي سفيان - ابر العتاهية \*

4. Translate into English either A or B :—

94

A.

ان النساء صحابية - قدمت على الرسول صلعم مع قومها  
 من بنى سليم و اسلمت معهم الا انها لم تدع ما كانت عليه من  
 بكائها على ابها و اخوها و بلغ رجدها على صغر اخيها انها

عميت من البكاء - فلما كانت في خلافة عمر اقبل بها بنو  
عنها الى عمر فقالوا - يا امير المؤمنين هذه النساء لم تزل  
تبكى على ابيها و اخوها في الجاهلية حتى ذهبت و ادركت  
الاسلام و قد قرحت مآقيها كما ترى فلو نهيتها - فدخل عليها  
فاذا هي على ما رُصف له فقال - ما اقترح مآقي عينيك  
قالت بكائي على السادات من مضر \*

## B.

هو شريم بن الحرث الكندي - استقضاء عمر على الكوفة  
و لم يزل بعد ذلك قاضيا خمسا و سبعين سنة لم يتعطل فيها الا  
ثلاث سنين امتنع فيها من القضاء في فتنة ابن الزبير  
فاستعفى شريم الحجاج من القضاء فاعفاه فلم يقض بين الناس  
حتى مات - و كان مزاحا - تقدم اليه رجلان في شيء فاجر  
أحدهما بما ادعى عليه الآخر و هو لا يعلم نقضى شريم فقال له  
اتقضى على بغير بينة - فقال قد شهد عندي ثقة - قال  
من هو - قال ابن اخت خالتك - مات شريم سنة تسع و سبعين  
و هو ابن مائة و عشرين سنة \*

5. Answer any three of the following :—

5×3

(a) Give examples to illustrate the uses of المضارع المجزوم , = 15  
and explain what is meant by الالام لتقوية العامل .

(b) Give examples of the various uses of the preposition و  
and explain the construction of بآبي أنت وامي .

(c) Render the following into Arabic, supplying the vowel-  
signs :—2 stars, 7 bottles, 21 boats, 84 women, 126 cows.

(d) Explain and exemplify the term الاضافة . Account  
for the following constructions :—

بيت المقدس - رُفَّتْ اِنْ اَسْتَقَرَّ

(e) Enumerate and give examples of the various ترابع .

6. Translate into Arabic :—

(a) A certain tyrannical king was very ambitious and pre-  
pared to attack a neighbouring kingdom. But the ruler of the latter

10

was wise; by his good deeds he had won the love of his subjects. So when the time of trouble came, they helped him with their possessions and their strength, and drove the foe beyond their borders.

(b) A truly great man is something wonderful. We people wake up in the morning, eat our food, go forth to our task, and return to sleep. Such matters occupy us all day long; if there is improvement in us or our work, it is slight. But one day a great teacher appears; at first we are unwilling to listen; later, however, his teachings make an impressions on us; many people accept his principles, and thus the world is raised to a higher level of living.

15

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### FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any two of the following :—

25

#### A.

نعمت بارخدايا ز عدد بيرون است  
شكر انعام تو هرگز نکند شکرگذار  
لا امید از در لطف تو کجا شایه رفت  
تاب قهر تو نداریم خدايا زهار  
نعلبائیکه ز ما دیدي و نپنسدیدی  
بخدارندي خود پرده پیش اي ستار  
سعدیا راست روان گوی سعادت بردند  
راستی کن که بمنزل نرسد کجرفتار



حیف از عمر گرانمایه که در لهر برفت  
 یارب از هر چه خطا رفت هزار استغفار  
 درد پنهان بتو گویم که خداوند منی  
 یا نگویم که تو خود مطلعی بر اسرار

## B.

اختر برج شرف کائنات  
 گره درج صدف ممکنات  
 جنبش اول ز محیط قدم  
 سلسله جنبان وجود از عدم  
 کلک عنایت چو رقم ساز کرد  
 از همه پیش این رقم آغاز کرد  
 صدر نشین اوست درین پیشگاه  
 گفت نبیا بود آنرا گواه  
 بود ز رخ شمع نبوت فروز  
 آب ندیده گل آدم هنوز  
 رفعت از در منبر افلاک را  
 رونق ازو خطئه لولاک را  
 رشعه جام کرمش سلسبیل  
 مرغ هوای حرمش جبرئیل  
 نور مبین ناصیه پاک او  
 حبل متین حلقه فتراک او

## C.

زهی چو عقل علم گشته در نیکوکاری  
 مسلم است ترا منصب جهانداري  
 کمینه قاعده تهغ تو جهانگیری  
 کمینه خاصیت دست تو کهرباري

زمانرا که بغفلت بخواب در شده بود  
 کشیده حزم تو در دیده کحل بیداری  
 جهان کلاه ز شادی بر افگند گر تو  
 بهفت قلعه افلاک سرفرد آری  
 توئی که حجت تو تیغ قاطع ست بدان  
 که تو بمملکت بحر و بر سزاواری  
 جهانیان بتو امروز چشم آن دارند  
 که زیر دامن انصاف شان نگهداری

2. Answer any *three* of the following :—

18

(a) Give in your own words the

حکایت سلطان محمود با پیر خارکش

(b) Describe the miracles of the Prophet alluded to by Jāmī,  
 in his کلیات

(c) Give a short biographical sketch of ظهیر فاریابی or of  
 عطار .

(d) Write a short description of ربیع following that of Sa'dī.

3. Turn into prose order, or give the substance in Persian of, the  
 following :—

7

پادشاهی بود نیکو شیوه  
 چاکری را داد روزی میوه  
 میوه از خوش همی خورد آن غلام  
 گفت خوشتر زین نخوردم من طعام  
 از خوشی کان چاکرش می خورد آن  
 بادشه خود آرزو میکرد آن  
 گفت یک نیمه بمن ده ای غلام  
 زانکه بس خوش میخوری تو این طعام

4. Answer any *two* of the following :—

18

(a) Analyse :—

صوفی میرفت در بغداد زود \* در میان راه آرازی شنود

(b) Mention the different kinds of اضافت with examples.

(c) Pick out the different instances of ترکیب اضافی in extract B, Question 1.

5. Give the significance of بی in the following :—

7

خداوندی - گوی سعاد - راستی - زهی - شادی -  
تویی - صرفی

6. Translate into Persian :—

25

Once there was a man and his wife. They had no house to live in. They lived in the fields, and they slept at the foot of a tree. The man caught a fish : he was a fisherman. The man was happy. He said, 'Why do men live in houses? This tree is my house. Why do they sleep in beds? The fields are my bed.' But his wife was never happy. She said, 'Why did I marry a poor fisherman? We have no house but the fields, no bed but the dust, no food but fish.' One day the fisherman went to the sea to catch fish. He put his net in the water. Then he sat on a stone. The sun was hot but he fell asleep. When he awoke he took his net. There was one fish in the net.

## SECOND PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any two of the following :—

30

A.

سلطان از مهابت این سخن پیاده شد - و گفت زنهار  
ای مادر من طاقت آن سر پیل ندارم - که بر تو ستم کرده -  
صورت حال باز نمایی تا داد تو ازو بستانم - گفت ای ملک  
همین غلام که بحضور تو تار یانۀ عقوبت بسر من کشید چشمه  
عیش من مکدر ساخته است - و گاری که معیشت من و  
یتیمان من از شیرش مهیا شدی بکشته و کباب کرده -  
ملک شاه بفرمود تا غلام را سیاست کردند و عوض ماده گاو  
ار هفتاد گاو از حلال تروچی بدو دادند \*

B.

سه شبانه روز در زاویۀ عزلت قرار گرفت - و از هیچ  
ممر فترقی روی نه نمود - هر ساعتی نحیف تر و ضعیف تر

میشد - عاقبت ضعف روی بقوت نهاد - و مرد زاهد قوی  
ضعیف شد - و از ادای مراسم طاعت و عبادت باز ماند - حق  
تعالی پیغمبر آن زمان را نزدیک وی فرستاد - و بعثتایی تمام  
پیغام داد که ای بنده من مدار عالم بر اسباب و وسائط نهاده ام -  
اگرچه قدرت من بسی سبب می تواند ساخت اما حکمت من  
اقتضای آن کرده که اکثر مهمات بسببها ساخته و پرداخته گردد -  
و بدین سبب قاعده افاده و استفاده تمهید یابد - پس اگر تو  
سبب فائده دیگری توانی شد بهتر از آن باشد که بسبب  
دیگری فائده گیری \*

C.

گویند پادشاه هند دشمنی داشت و بقصد حمله قدم در  
مملکت او گذاشت - سلطان هند خواست نعل بها بار دهد و  
صلح کند - بهرام مانع شد و گفت با خصم جنگ میکنم - چون  
لشکر مقابل یکدیگر گشتند بهرام بسرکردهای هند گفت شما از  
پست سر من آماده کار باشید - و خود حمله بر سپاه دشمن  
کرد - و تیرها بطرف آنها انداخت - لشکریان آنطرف دیدند  
در جلو این تیرها ایستادن ممکن نیست - پشت به بهرام کرده  
گریختند - و بهرام غنایم زیاد از ایشان بچنگ آورد - چون  
پادشاه هند این هنراز بهرام دید ولایات اردبیل و مکران را به  
بهرام داد دختر خود را بهار تزویج کرد \*

2. Answer any two of the following questions :—

16

(a) Give a brief account of the life of Farīdūn. Who succeeded him in his kingdom?

(b) Compare or contrast between the characters of Sultān Maḥmūd and Nādir Shāh.

(c) Describe shortly the history of Shāpūr Zu'l-Aktāf particularly with reference to his contact with the Roman emperor.

3. Either, Explain in your own Persian :—

من طریق سعی می آرم بجا  
لیس للانسان الا ما سعی

دامن مقصود اگر آرم بکف  
از غم و اندوه مانم بر طرف  
ور نشد از جهد من کاری کلام  
من دران معذور باشم و السلام

Or, Narrate briefly the story of King Dabshlim and the secret treasure.

4. Translate into English any two of the following :—

A.

مرد باید که مدام صحبت نیکان اختیار نماید - و از  
صحبت بدان همچون تیر بگریزد - زیرا که صحبت در تحسین  
یا تخریب اخلاق اثری عظیم دارد بدین وجه مولانا روم که یکی  
از اکابر صوفیای اسلام است فرموده \*

صحبت صالح ترا صالح کند

صحبت طالح ترا طالح کند

نمی بینی که اگر کسی چند روز با خمار بنشیند یکی از مشاهیر  
می نویشان بشمار می آید - و کسیکه گاهی در عمر سر بسجده  
فرود نیارده چندی با زاهدی پخته کار مصاحبت نماید در  
اندک مدتی یکی از تهجد گزاران شب زنده دار میگردد \*

B.

توانگرزاده را دیدم بر سر پدر نشسته و با درویش بچه  
بمناظره در پیوسته که صندوق تربت پدر ما سنگین است و کتابه  
رنگین - و فرش رخام انداخته و خشت پیروزه درو ساخته  
بگور بدرت چه ماند - خشتی دو فراهم نهاده و مشتی دو خاک  
برو پاشیده - درویش پسر این بشنید و گفت تا بدرت در زیر  
آن سنگهای گران بر خود بچنبد پدر من به بهشت رسیده باشد -

خر که بروی نهند کمتر بار

بیشک آسوده تر کند رفتار

C.

حکیمی نامور را پرسیدند که درختان را که خدای  
 عز و جل آفریده است و برومند هیچ یک را آزاد نخوانده آند  
 مگر سرور را که ثمره ندارد - گوئی درین چه حکمت است ؟  
 گفت هر یکی را دخلی معین هست بوقتی معلوم - گهی  
 بوجود آن تازه آند و گاهی بعدم آن پژمرده و سرور را هیچ ازین  
 و همه وقت خوش است و اینست صفت آزادگان -

برینکه میگنزد دل منه که دجله بسی

پس از خلیفه بخواهد گذشت در بغداد

گرت ز دست بر آید چو نخل باش کریم

ورت ز دست نیاید چو سرور باش آزاد

5. Translate into Persian :—

20

Bengal is a fertile country. There are many trees and rivers in it. On account of timely rains in its season, crops grow in abundance in this country. But owing to damp weather the climate is unsuitable for health, and the death rate is higher in this country than in its sister provinces. A particular fever known as malaria takes a heavy toll of human lives every year from this province.

### LATIN.

*Paper-Setters*— { Mr. W. C. WORDSWORTH, M.A.  
 ,, NALINIMOHAN CHATTERJEE.

*Examiners*— { Mr. W. C. WORDSWORTH, M.A.  
 REV. FATHER VERBOCK HAVEN, S.J.

### FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate :—

- (a) O matre pulchra filia pulchrior,  
 quem criminosus cumque voles modum  
      pones iambis, sive flamma  
      sive mari libet Hadriano.  
 non Dindymene, non adytis quatit  
 mentem sacerdotum incola Pythius.  
      non Liber aequae, non acuta  
      sic geminant Corybantes aera,

20

tristes ut irae, quas neque Noricus  
deterret ensis nec mare naufragum  
nec saevus ignis nec tremendo  
Iuppiter ipse ruens tumultu.

- (b) Pone me pigris ubi nulla campis  
arbor aestiva recreatur aura,  
quod latus mundi nebulae malusque  
Iuppiter urget;  
pone sub curru nimium propinqui  
solis in terra domibus negata :  
dulce ridentem Lalagen amabo,  
dulce loquentem.

- (c) Quid brevi fortes iaculamur aevo  
multa, quid terras alio calentis  
sole mutamus? patriae quis exsul  
se quoque fugit?  
scandit acratas vitiosa navis  
cura nec turmas equitum relinquit,  
ocior cervis et agente nimbos  
ocior Euro,  
laetus in praesens animus quod ultra est  
oderit curare et amara lento  
temperet risu. nihil est ab omni  
parte beatum.

2. Explain the allusions in : —

10

- (a) vidimus flavum Tiberim, retortis  
litore Etrusco violenter undis,  
ire deiectum monumenta regis  
templaque Vestae.
- (b) hunc et intonsis Curium capillis  
utilem bello tulit et Camillum  
saeva paupertas et avitus arto  
cum lare fundus.
- (c) hic bellum lacrimosum, hic miseram famem  
pestemque a populo et principe Caesare in  
Persas atque Britannos  
vestra motus aget prece.
- (d) tecum Philippos et celerem fugam  
sensi relicta non bene parmula,  
cum fracta Virtus et minaces  
turpe solum tetigere mento.

3. Say briefly in what you think the charm of Horace's *Odes* consists.

5

4. Give the meaning of—*platanus caelebs, victima nil miserantis Orci, micat inter omnis Iulium sidus, audax Iapeti genus, sororum fila trium atra, approbrium pagi.*

5

5. Translate :—

20

(a) Quae quum ita sint, Catilina, perge quo coepisti :  
egredere aliquando ex urbe; patent portae; proficiscere. Nimium diu  
te imperatorem tua illa Manliana castra desiderant. Educe tecum  
etiam omnis tuos, si minus, quam plurimos; purga urbem. Magno  
me metu liberaveris, modo inter me atque te murus interstit. Nobis-  
cum versari iam diutius non potes; non feram, non patiar, non sinam.  
Magna dis immortalibus habenda est atque huic ipsi Iovi Statori, anti-  
quissimo custodi huius urbis, gratia, quod hanc tam tætram, tam horri-  
bilem tamque infestam rei publicae pestem totiens iam effugimus.

(b) O bellum magno opere pertimescendum, cum hanc sit habiturus Catilina scortorum cohortem praetoriam! Instruite nunc, Quirites, contra has tam praeclaras Catilinae copias vestra praesidia vestrosque exercitus. Et primum gladiatori illi confecto et saucio consules imperatoresque vestros opponite; deinde contra illam naufragorum eiectam ac debilitatam manum florem totius Italiae ac robus educite. Iam vero urbes coloniarum ac municipiorum respondebunt Catilinae tumulis silvestribus.

6. Give a brief account of the part taken by Cicero in crushing this conspiracy. 5

7. Explain :—*illa Manliana castra, gladiator, coloniae, municipia Iupiter Stator, Quirites, cohors praetoria, imperatores.* 10

8. Who were Q. Metellus and M. Lepidus? Explain *pridie Kal. Ianuarias, ante diem vi Kal. Novembris*. Give the derivation of —*naufragium, colonia, praesidium, gubernator.* 5

9. Explain with illustrations the use of the ablative absolute, the genitive of price, and the accusative of the part affected. 6

10. Give the perfect participles of—*orior, ordior, odi, figo, pario, audeo, duco, comparo.* 6

11. Give the Latin for the words italicized :— 8

- (a) He remained *three months*.
- (b) *Provided that* the enemy run away.. ...
- (c) He could not speak *for tears*.
- (d) *We must use* our time.
- (e) *I am sorry* for what I did.

## SECOND PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :— 10

- (a) Vereor ut hoc tibi profuturum sit.
- (b) Nemo risum praeiuit qui ex se cepit.
- (c) Huic culpa ignosci potest.
- (d) Alius circumspectus cum quo conferre possimus

manum.

(e) Vis scire quam non paeniteat hoc pretio aestimasse virtutem?

2. Translate into English :—

25

Hic ut e navi egressus est, quamquam Theramenes et Thrasylbulus eidem rebus praefuerant, simulque venerant in Piraeum, tamen illum unum omnes prosequerantur, et, id quod nunquam antea usu venerat, nisi Olympiae victoriis, coronis aureis aeneisque vulgo donabatur. Ille lacrimans talem benevolentiam civium suorum accipiebat, reminiscens pristini temporis acerbiter. Postquam astu venit, concione advocata sic verba fecit, ut nemo tam ferus fuerit, quin ejus casum lacrymarit, inimicumque his se ostenderit, quorum opera patria pulsus fuerat, proinde ac si alius populus, non ille ipse, qui tum flebat, eum sacrilegii damnasset.



## 3. Translate into English :—

25

Odi profanum vulgus et arceo;  
 favete linguis : carmina non prius  
     audita Musarum sacerdos  
         virginibus puerisque canto.  
 regum timendorum in proprios greges,  
 reges in ipsos imperium est Iovis,  
     clari Giganteo triumpho,  
         cuncta supercilio moventis.  
**est ut viro vir latius ordinet**  
 ardua sulcis, hic generosior  
     descendat in Campum petitor,  
         moribus hic meliorque fama  
 contendat, illi turba clientium  
 sit maior : æqua lege Necessitas  
     sortitur insignes et imos;  
         omne capax movet urna nomen.

## 4. Translate into Latin :

20

(a) All the world knows that the moon moves round the earth.

(b) So far are we from admiring great cities, that Rome itself does not satisfy us.

(c) Success comes to the common man, and even to commonplace ability.

(d) I have bedecked them with gold and silver and ivory, but within there is nothing good.

(e) Let every season, every place, teach you how easy it is to renounce Nature and fling her gift back in her face.

## 5. Translate into Latin :—

20

Cincinnatus lived on the other side of the Tiber on a little farm, which he cultivated with his own hands. The messengers who had been sent by the senate found him sitting in the fields. They told him that they had come to inform him that he had been appointed dictator, and asked him to set out with them as soon as possible. Thereupon he bade his wife Racilia bring him his toga, in order that he might not displease the messengers of the senate. When it had been brought, he said he was willing to obey their commands, and would go with them at once.

## FRENCH.

Paper-Setters  
 and  
 Examiners—

{ REV. FATHER E. POPULAIRE, S.J.  
 { MR. NAGENDRANATH CHANDRA, M.A.

## FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

## 1. Translate into English any five of the following passages :—

25

(a) Ma mère elle-même fut tellement émue par la reconnaissance passionnée et le dévouement un peu craintif de cette mignonne et tendre créature, qu'elle se mit à l'appeler : ' Ma fille.' Parfois quand

la petite avait fait quelque chose de bon, de délicat, ma mère relevait ses lunettes sur son front, ce qui indiquait toujours une émotion chez elle, et elle répétait : ' Mais c'est une perle, une vraie perle, cette enfant ! ' Ce nom en resta à la petite Claire, qui devint et demeura pour nous Mlle. Perle.

(b) C'était l'hiver dernier, dans une forêt du nord-est de la France. La nuit vint deux heures plus tôt, tant le ciel était sombre. J'avais pour guide un paysan qui marchait à mon côté, par un tout petit chemin, sous une voûte de sapins dont le vent déchainé trait des hurlements. Entre les cimes, je voyais courir des nuages en déroute, des nuages éperdus qui semblaient fuir devant une épouvante. Parfois sous une immense rafale, toute la forêt s'inclinait dans le même sens avec un gémissement de souffrance.

(c) Sur la montagne blanche, le tas de maisons pose une tache plus blanche encore. Elles ont l'air de nids d'oiseaux sauvages, accrochées ainsi sur ce roc, dominant sur ce passage terrible ou ne s'aventurent guère les navires. Le vent, sans repos, fatigue la côte nue rongée par lui, à peine vêtue d'herbe; il s'engouffre dans le détroit dont il ravage les bords. Les deux traînées d'écume pâle, accrochées aux pointes noires des innombrables vagues qui percent partout les vagues, ont l'air de lambeaux de toiles flottant et palpitant à la surface d'eau.

(d) *Harp.* Hors d'ici tout à l'heure et qu'on ne réplique pas. Allons, que l'on détale de chez moi, maître juré filou, vrai gibier de potence.

*La Fl.* Je n'ai jamais rien vu de si méchant que ce maudit vieillard, et je pense, sauf correction, qu'il a le diable au corps.

(e) *Harp.* Cela ne sera rien. Allez vite boire dans la cuisine un grand verre d'eau claire. Voilà de mes damoiseaux flouets qui n'ont plus de vigueur que des poules. C'est-là ma fille, ce que j'ai résolu pour moi. Quant à ton frère, je lui destine une certaine veuve dont ce matin on m'est venu parler; et pour toi, je te donne au Seigneur Anselme.

(f) *Harp.* Comment, pendar? c'est toi qui t'abandonnes à ces coupables extrémités?

*Clé.* Comment, mon père? c'est vous qui vous portez à ces honteuses actions?

*Harp.* C'est toi qui te veux ruiner par des emprunts si condamnables?

*Clé.* C'est vous qui cherchez à vous enrichir par des usures si criminelles?

- |  |    |
|--|----|
| 2. Write a short summary of the story of <i>Une Vendetta</i> .   | 13 |
| 3. Write short notes on :— <i>Saint Hubert, de l'iau, camarau, Bar-bizon</i> .                         | 12 |
| 4. Give the principal rules regarding the use and the omission of 'articles' in French. Give examples. | 12 |
| 5. How are the plural of compound nouns formed in French? Give examples to illustrate your answer.     | 6  |
| 6. Conjugate the Past Indefinite (Indicative Mood) of <i> falloir</i> .                                | 2  |
| 7. Translate into French :—  | 20 |

The holidays are over. John must now return to England. He is a little sad to leave his friends of Paris. He will leave on the 6th August. His parents will be glad to see him again. He will see again his dear old London. He has learnt to speak French a little, and this gives him great joy. His friends at school will be envious of him, and will try also to pick up a little of the French language. John has bought photographs of the different places he saw in France, and on his return he will show them to his friends and relations.

## SECOND PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate one of the following extracts :—

30

- (a) Aimez votre jeunesse, aimez, gardez la toute !  
 Elle est de vos aînés l'espoir et le trésor ;  
 Portez-la fièrement, sans en perdre une goutte ;  
 Portez-la devant vous comme un calice d'or,  
 Peut-être on vous dira d'y boire avec largesse,  
 D'y verser hardiment le vin des passions ;  
 D'autres vous prêcheront l'égoïste sagesse  
 Qui rampe et se réserve à ses ambitions.  
 Mais aux vils tentateurs vous serez indociles !  
 La Muse vous conseille et vous saurez choisir ;  
 Restez dans le sentier des vertus difficiles,  
 Votre âge a des devoirs plus doux que le plaisir.  
 A vous de mépriser ce qu'un autre âge envie,  
 Tout bien et tout renom qu'on acquiert sans efforts  
 Dieu vous a faits si fiers, si purs, si pleins de vie,  
 Pour les belles amours et pour les belles morts,  
 Venez donc ! je vous suis, et nous volons ensemble ;  
 Nous renouons le cours du temps précipité ;  
 Vous me faites revoir tout ce qui vous ressemble,  
 Toute chose où rayonne un éclair de beauté.
- (b) Lorsque avec ses enfants vêtus de peaux de bêtes,  
 Echevelé, livide au milieu des tempêtes,  
 Caïn se fut enfui de devant Jéhovah,  
 Comme le soir tombait, l'homme sombre arriva.  
 Au bas d'une montagne en une grande plaine ;  
 Sa femme fatiguée et ses fils hors d'haleine  
 Lui dirent : ' Couchons-nous sur la terre et dormons.'  
 Caïn, ne dormant pas, songeait au pied des monts.  
 Ayant levé la tête, au fond des cieux funèbres,  
 Il vit un œil tout grand ouvert dans les ténèbres  
 Et qui le regardait dans l'ombre fixement.  
 'Jge suis trop près, dit-il avec un tremblement.  
 Il réveilla ses fils dormant, sa femme lasse,  
 Et se remit à fuir sinistre dans l'espace.  
 Il marcha trente jours, il marcha trente nuits.  
 Il allait, muet, pâle et frémissant aux bruits,  
 Furtif, sans regarder derrière lui, sans trêve,  
 Sans repos, sans sommeil : il atteignit la grève  
 Des mers dans le pays qui fut depuis Assur.

2. Translate one of the following extracts :—

30

(a) L'homme appelé à commander aux autres sur les champs de bataille, a d'abord, comme dans toutes les professions libérales, une instruction scientifique à acquérir. Il faut qu'il possède les sciences exactes, les arts graphiques, les théories des fortifications. Ingénieur, artilleur, bon officier de troupes, il faut qu'il devienne en outre géographe, et non géographe vulgaire, qui sait sous quel rocher naissent le Rhin ou le Danube, et dans quel bassin ils tombent, mais géographe profond, qui est plein de la carte, de son dessin, de ses lignes, de leur rapport, de leur valeur. Il faut qu'il ait ensuite des connaissances exactes sur la force, les intérêts et le

caractère des peuples; qu'il sache leur histoire politique, et particulièrement leur histoire militaire; il faut surtout qu'il connaisse les hommes, car les hommes à la guerre ne sont pas des machines: au contraire, ils y deviennent plus sensibles, plus irritables qu'ailleurs, et l'art de les manier d'une main délicate et ferme, fut toujours une partie importante de l'art des grands capitaines.

(b) Dès que César est assis, Cimber se jette à ses pieds, lui demandant le rappel de son frère, qu'il avait exilé. Les autres conjurés entourent César pour appuyer cette demande: le dictateur refuse: trop pressé par leurs instances, il veut se lever; Cimber le retient par sa robe. C'était le signal convenu. César s'écrie: 'Ce ne sont plus des prières, c'est de la violence!' Casca, placé derrière son siège, le frappe à l'épaule, mais faiblement; car la crainte d'un coup si hardi rendait sa main tremblante et son poignard incertain. 'Misérable! que fais-tu?' dit César en se retournant; en même temps il perce le bras de Casca avec un poinçon qu'il tenait dans la main. Casca appelle son frère à son secours; tous les conspirateurs tirent leurs poignards; César s'élance sur eux; il écarte les uns, renverse les autres; il reçoit enfin un coup de poignard dans la poitrine. Le sang qu'il perd, les glaives qu'on présente à ses yeux n'effraient pas son courage; il se défend de tous côtés, quoique sans armes, comme un lion furieux et blessé; mais au moment où il aperçoit Brutus, qui lui enfonce son poignard dans le flanc, il prononce en gémissant ces mots: 'Et toi, Brutus, aussi!'

3. Translate into French:—

15

(a) He has bought himself a nice house. Has he shown it to you?

(b) He was so tired that he fell asleep in the arm chair.

(c) I saw the sea last week for the first time.

(d) We shall return home on August 31st.

(e) No one could tell us where he was.

(f) The newspapers have come. Which one will you have?

4. Translate into French:—

20

The unfortunate Queen Margaret and her child, after the defeat of Towton, were wandering in a forest after having been robbed by some brigands. As the night was approaching, they continued to wander through the wood, when she perceived another robber coming towards her, armed to the teeth. Any other woman would have been terrified, but Margaret with the courage of despair, placing young Edward in the man's arms, said: 'My friend, this is the son of your king; save him from his enemies.' This man, not destitute of generous feelings, was moved by her noble confidence.

## BENGALI TEXT (FOR FEMALE CANDIDATES).

*Paper-Setters*— { SRIMATI SANTA NAG, B.A.  
                              ,, SUNITIBALA CHANDA, M.A.

*Examiner*—MRS. TATINI DAS, M.A.

## FIRST PAPER. (POETRY TEXTS).

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Explain any two of the following extracts with reference to the context :— 20 20

- (a) নানা সুরের আকুলধারা  
মিলিয়ে দিয়ে আত্মহারা  
একটি নমস্কারে, প্রভু,  
একটি নমস্কারে  
সমস্ত গান সমাপ্ত হোক  
নীরব পারাবারে ।  
হংস যেমন মানসযাত্রী.  
তেমনি সাবী দিবসরাত্রি  
একটি নমস্কারে, প্রভু,  
একটি নমস্কারে  
সমস্ত প্রাণ উড়ে চলুক  
বহামরণ — পারে ॥
- (b) প্লাবনে সলিল যথা উঠে উথলিয়া  
ছাপায়ে তটিনী-বন্ধ, উঠিল তেমনি  
শোকাবেগ সতী-হৃদে পতির বচনে ।  
সম্মরিয়া মহাপ্রাণা মহাধৈর্য্যে পুনঃ  
সে উচ্ছ্বাস, দীর্ঘশ্বাস ফেলিয়া তখন  
উত্তরিল—“হায় প্রভো, দোষী কত দোষে  
এ দাসী বিধির পদে, তাই দিবানিশি  
লেলিহান হতভূক্ শতমুখ দিয়া  
দহিছে আমারে, আমি কহিব কি আর !
- (c) “তব ভাগ্যে, ভাগ্যবতি । হতজীব রণে  
ইন্দ্রজিৎ ! তেঁই লক্ষা বিলাপে এক্ষণে  
দিবানিশি এতদিনে গভবৎ দেবি

কর্কর-জঁখর বলী । কাঁদে মন্দোদরী ;  
 রক্ষঃকুলনারীকুল আকুল বিষাদে ;  
 নিরানন্দ রক্ষোরথী । তব পুণ্যবলে,  
 পদ্মাক্ষি, দেবর তব লক্ষণ সুরথী  
 দেবের অসাধ্য কর্ম সাধিলা সংগ্রামে,—  
 বধিলা বাসবজিতে — অজ্ঞেয় জগতে ।”

২. Translate any two of the following extracts into English :—

20

- (a) দেখিলেন হরি জ্ঞান, ভক্তি, কর্ম,  
 তিন মহাপ্রোতে করিয়া প্রাবিত  
 সমগ্র ভারত, আজি এ প্রভাসে  
 কৃষ্ণ-প্রেমার্ণবে হয়েছে মিলিত ।  
 প্রণমি সাষ্টাঙ্গে আকুল উচ্ছ্বাসে  
 কহে শৈল দর দর হৃদয়ন—  
 “দেখ নরনাথ ! দেখ নারায়ণ !—  
 আর্ঘ্য অনাঘ্যের প্রেম সাম্বলন !  
 ত্রিযুগের হংসা, কলহ, বিদ্বেষ,  
 তব প্রেম-প্রোতে গিয়াছে ভাসি ।  
 দেখ ধর্মরাজ্য ! প্রেম রাজ্য তব !  
 কি প্রেম !—কি শান্তি !—অমৃতরাশি ।”
- (b) অযোধ্যাতুষণ তুমি অযোধ্যার সার ।  
 তোমা বিনা অযোধ্যা দিবসে অন্ধকার ॥  
 চল প্রভু অযোধ্যায় লহ রাজ্যভার ।  
 দাসবৎ কর্ম করি আজ্ঞা অনুসার ॥  
 শ্রীরাম বলেন তুমি ভরত পণ্ডিত ।  
 না বুঝিয়া কেন বল এ নহে উচিত ॥  
 মিথ্যা অমুযোগ কেন কর বিমাতার ।  
 বনে আইলাম আমি আজ্ঞায় পিতার ॥  
 চতুর্দশ বৎসর পালিয়া পিতৃবাক্য ।  
 অযোধ্যা যাইব আমি দেখিবা প্রত্যক্ষ ॥
- (c) শিবিরে বসেন প্রভু রত্নকুলমণি,  
 আনন্দসাগরে মগ্ন ; সম্মুখে সৌমিত্রি  
 রথীশ্বর, যথা তরু হিমালয়বিহনে  
 নবরস ; পূর্ণশরী সুহাস আকাশে  
 পূর্ণিমায় কিম্বা পদ্ম, নিশা অবসানে,  
 প্রহর । দক্ষিণে রক্ষঃ বিভীষণ বলী

মিত্র, আর নেতৃ বৃত্ত—দুর্দ্বন্দ্ব সংগ্রামে—  
দেবেন্দ্রে বেড়িয়া যেন দেবকুলরথী ।

3. Translate into English any one of the following passages :—

20

(a) যাহাতে প্রাণে ভাল হইবার জন্ত প্রগাঢ় আবেগ জন্মে, তজ্জন্ত চেষ্টা করা কর্তব্য । ভাল হইতে যাহার বলবতী ইচ্ছা আছে ঈর্ষা তাহার ভিতরে কার্য্য করিবার অবকাশ পায় না । ভাল হইবার জন্ত যাহার হৃদয় ব্যাকুল হয়, তিনি সর্বদা পরের গুণকাহিনী শুনিয়া, পরের ভাল দেখিয়া দেখিয়া, আপনাকে উন্নত করিবার চেষ্টা করেন, পরের দিকে কুদৃষ্টিতে তাকাইবার তাহার সময় থাকেনা ও পরের মন্দ চিন্তা যে নিজের ভাল হইবার পথে কষ্টক, তাহা তিনি বিশেষভাবে হৃদয়ঙ্গম করিতে পারেন । যে অপর কোন ব্যক্তির প্রতি ঈর্ষাষিত, তাহার মন সর্বদা সেই ব্যক্তির অনিষ্ট করিবার জন্ত খাবত হয়, তাহার আর ভাল হইবার অবসর থাকে কোথায় ?

(b) এই মহাপুরুষের ঈদৃশ মহীয়সী কীর্তির কখনও বিলয় হইবে না । পৃথিবীর যে কোন সভ্যদেশ এই মহাপুরুষকে পাইলে, আপনাকে সম্মানিত মনে করিতে পারে । পৃথিবীর যে কোন সভ্যজাতি এই মহাপুরুষের সমুচিত সম্মান রক্ষা করিতে পারিলে, আপনাদের গৌরব বোধ করিতে পারে । বাঙ্গলার সৌভাগ্য যে তাহার ক্রোড়দেশে ঈদৃশ মহাপুরুষের আবির্ভাব হইয়াছিল । বাঙ্গলা সাহিত্যের একান্ত সৌভাগ্য যে, ঈদৃশ মহাপুরুষের অনুরাগে, যত্নে ও অধ্যবসায়ে তাহার পরিণতীকর সহিত পরিপুষ্টি হইয়াছিল । এই সৌভাগ্যের মধ্যে এক বিষয়ে বঙ্গের নিরতিশয় দুর্ভাগ্য ঘটিয়াছে । বঙ্গের কৃত্তী পুরুষগণ এই মহাপুরুষের সমুচিত সম্মানরক্ষায় আজ পর্য্যন্ত উদাসীন রহিয়াছেন । কিন্তু যদি শিক্ষা সার্থক হয়, তাহা হইলে অক্ষয়কুমারের নাম বিস্মৃতিসাগরে নিমজ্জিত হইবে না । সাহিত্য ক্ষেত্রে অক্ষয়কুমারের অসামান্য কার্য্যই তাহাকে অক্ষয় করিয়া রাখিবে ।

4. (a) *Either*, What is the moral underlying the Birakumar-badha Kabya? Write a short note on the metre and the language in it.

10

Or, Describe the funeral scene of Meghanada as depicted in the Meghanabadadha Kabya.

(b) Give an estimate of গীতাঞ্জলি in the field of Bengali literature.

9

5. (a) Rewrite the following after necessary correction :—

8

জীবনে সাফল্যতা লাভ সহজ লভ্য নহে । মহিষাসি সাধনা ও অত্যাধিক মানসিক বল না থাকিলে সামান্য কার্য্যেও উৎকর্ষতা লাভ হয় না । আশা করি এই সমস্ত শরণে রাখিয়া জীবনে কার্য্য করিলে সূখী হইবে । কর্তৃক্ষেত্রে ভগবানকে বিনিমিত হইলে চলিবে না ।

(b) Fill up the gaps :—

6

ভূদেব—কর্মক্ষেত্রে—করেন, তখন তিনি—ভাবে—ছিলেন।—জ্ঞান-ভাণ্ডারের—তাহার—উদ্বাটিত হইয়াছিল।—শিক্ষালাভ—তিনি—বিষয়ে—হইয়াছিলেন।

(c) Substitute a single word for each of the following :—

3

যাহার শত্রু জন্মে নাই। যাহার স্বামী বিদেশে বাস করেন। যাহা পূর্বে শোনা যায় নাই।

(d) Clearly define a কর্মধারয় and a বহুব্রীহি compound with illustrations.

## SECOND PAPER. (PROSE TEXTS).

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any one of the following passages :—

20

(a) জগতে এক শ্রেণীর লোক আছে,—তাহাদের পতনশক্তি যেমন প্রবল, উত্থানশক্তিও তেমনি সতেজ। যখন যে দিকে ঝাঁক দেয় তখন সেই দিকেই তাহার পরাকাষ্ঠা লাভ করিয়া ছাড়ে। মৃগাক্ষও সেই দলের লোক। সে যতখানি নামিয়া গিয়াছিল, উঠিতে আরম্ভ করিতেই, ঠিক ততখানি বেগের সহিত উঠিতে আরম্ভ করিয়াছে। ভিতর হইতে বাহির অবধি সমস্তই আজ সে নূতন করিয়া গড়িবে ইহাই তাহার ইচ্ছা। তাই পূর্বাচহ্নের কিছু বাকী রাখিবেনা, এইরূপ সঙ্কল্প করিয়া চারিদিক্ দিয়াই সে একসঙ্গে সংস্কার কার্যটা আরম্ভ করিয়া দিল। বৈঠকখানার মোহিনী নারীচরিত্রগুলি একদিন অত্যন্ত কুৎসিত বোধে রূপরাপ করিয়া পুষ্করিণীর জলে ফেলিয়া দিল; আলমারি খুলিয়া অনেক-গুলি কাঁচের ঠুনকো বাসন টানিয়া ফেলিল; খান্সামাটাকে বক্শিস্ সহ মাহিনা চুকাইয়া বিদায় দিল। পরে একদিন হঠাৎ দেখা গেল, বহুদিনের অসংস্কৃত অন্তরমহলে রাজমিস্ত্রির দল ভারী বাঁধিতেছে। অবশ্য ইহার ফলে তাহাকে কিছু পাপাঘুটানও করিতে হইয়াছিল।

(b) ঝড়বৃষ্টি থামিয়া গিয়াছে, আকাশ পরিষ্কার, প্রভাত-অরুণের রক্তিমরাগ পূর্ব গগনে দেখা দিতেছে। প্রাতে উঠিয়াই বিছানাপত্র বাধিয়া সকলেই অদম্য উৎসাহে ঠাঁটিতে লাগিলাম। পথে বেশ শীত বোধ হইতে লাগিল। প্রভাত-সূর্য্য-কিরণে জগৎ হাসিয়া উঠিল। বন কুসুমের গন্ধে দশদিক ভরিয়া গেল। বৃক্ষশাখাঙ্কিত পাহাড়ি বুলবুলের গান শুনিতে



শুনিতে আনন্দে চলিলাম। তাহার সহ নির্ঝরির কলতান মিশিয়া কর্ণ-বিবরে যেন অমৃতধারা ঢালিতেছিল। এখানে মন্দিরমধ্যে নারায়ণের সুন্দর মূর্তি আছে। তাঁহাকে দর্শন করিয়া প্রণাম করিয়া আমরা সাড়ে তিন মাইল পথ চক্কা চটী আসিলাম। এখানে চক্ৰশেখর মহাদেব ও দুর্গাদেবীর মূর্তি আছে। পাণ্ডা বলিল এই স্থানে ক্ষুদ্র চক্ৰানদীর সহ মন্দাকিনীর সঙ্গম হইয়াছে।

2. Explain any *two* of the following passages with reference to the context :— 20

(a) বিশ্বনাথ বিশ্ব জুড়িয়া আছেন, ক্ষুদ্র মানব জীবনে তাঁহার প্রতিমূর্তি পিতায় — মাতায় — স্বামী — সখায় শতভাবে প্রকটিত।— একজন সাধু রমাবল্লভের সহিত বিবিধ শাস্ত্রালোচনার মধ্যে এই কথাটি বলিবামাত্র বাণীর ক্ষুধিত চিত্ত ইহা একেবারে কেন গ্রাস করিয়া লইল? সাধু বলিলেন,—“জগতে এই সম্বন্ধে যত বিস্তৃত করা যায়, মনের ততই প্রসার হয়। ক্ষুদ্র ‘স্বকে’ বৃহৎ করিতে পারিলেই ‘অহং’ এর যথার্থ ধ্বংস ঘটে। ঘরের দ্বার আঁটিয়া শত্রুহস্ত হইতে আত্মরক্ষা করা ভাল, না, সজ্জদ্বারা শক্তিশীন হওয়া প্রিয়? ”

(b) ভক্তহৃদয়ের ভক্তিরস শোণিতাকরে যেন সেখানে ফুটিয়া আছে,—চাহিয়া থাক। যায়না, এমনি উজ্জল লাল! সে শিহরিয়া চকু মুদিল। এ কি লীলা নাথ! এ কি তোমার লীলা? না, না, প্রেমাবতার তুমি, তোমার ত এ ভূবা নয়। এ কি তোমার সাজে? এ যে অট্টহাস্তময়ী নরমুণ্ডমালিনী নিশ্চয়মতীর প্রতিকৃতি করালীর বীভৎসভূষা চিহ্ন! তোমাতে ত হিংসার লেশ নাই। প্রাণময়; প্রেমময়—যে তুমি।—তবে এ কি? এ পাপ যে আমারই।

(c) চলিতে চলিতে পথিক দল যেমন তৃষ্ণায় ব্যাকুল, আশ্রয় ভ্রমণবান্ ত্বার্ত্ত পথিককুলের জন্ত মধুর নির্ঝরির জলধারা অকাতরে ঢালিয়া দিতেছেন; এমন সুমধুর জলও কখন পান করি নাই। এই নীরস পাবাণের বক্ষ ভেদ করিয়া কোথা হইতে এই স্বাদু জলধারা পতিত হইতেছে, ইহা দেখিয়া ভগবানের অপার করুণার কথা ভাবিয়া চকু আনন্দ-অশ্রুতে পূর্ণ হয়। এই বিজন বনভূমিতে সহায়হীন মানব তৃষ্ণায় ব্যাকুল হইয়া পর্ততমালায় স্থানে মরিয়া যাইত কিন্তু কৃপাময় ভগবানের অপার করুণা।

3. (a) Give an estimate of the character of either অশ্বরূপা or সুগন্ধমোহন as depicted in স্বপ্নশক্তি। 10

(b) Describe the natural scenery as narrated in the pilgrimage to Kedarnath from Rambhari with a special reference to the authoress's reverence. 10

4. *Either*, What is a মহাকাব্য? Is Hemchandra's বৃত্তসংহার a মহাকাব্য? How far is Hemchandra indebted to Madhusudan with regard to his বৃত্তসংহার? 20

*Or*, What special features do you find in Hemchandra's lyrical poems? Name some of his lyrics.

5. (a) Form short sentences to distinguish between any three of the following :— 6

আপন and আপণ ; বীর and বীড় ; বিন্মত and বিন্মিত ; দ্যুত and দূত ; দ্বিপ and দ্বীপ ।

(b) Use the antonyms of any six of the following words in sentences of your own :— 6

অমুরাগ, ঐহিক, নিরত, স্তম্ভ, চঞ্চল, আবির্ভাব, সঞ্চয়, কৃত্রিম ।

6. (a) Combine the following sentences into a simple one :— 5

নরেন্দ্র অতিশয় সম্ভরণপটু ছিলেন । তিনি সম্ভরণ দিয়া গঙ্গা পার হইলেন । তিনি অপর পারে উপস্থিত হইলেন । তিনি সেই অন্ধকার নিশীথে সিন্ধুরশ্মির ও সিন্ধুবস্ত্রে বালুকাক্ষেত্রে বিচরণ করিতে লাগিলেন ।

(b) Compose a simple sentence in Bengali using all the cases in it. 3

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### HINDI (FOR FEMALE CANDIDATES).

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*Examiners*— { MR. AMBIKA BAJPAYI.  
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### FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Explain one of the following, with reference to the context :— 10

(a) पूजा करनेवाले अपनी पूजा का फल और व्यापारी अपने माल का मोल चाहते हैं । मैं केवल आशा से आया हूँ, पूजा लेकर नहीं ; मैं भोज्य मांगने आया हूँ, व्यापार करने नहीं । मेरे साथ बड़ी कर जो तेरे योग्य है, न कि बड़ जिसकी योग्य मैं हूँ ।

(b) उपदेशकों की शिक्षा से मूढ़ होना, भूद मार्ग पकड़ना, बिहानों पर नीचता का दोष लगाना न चाहिये । उपदेशकों की मन्त्राली बजाजों को दूकान खी है, जब तक हान न दोगे, माल न पाओगे । ऐसी ही जब तक श्रद्धा न होगी, तब तक कल्याण न होगा ।

2. Translate any two of the following passages into English :—

20

- (a) माधु सन्त कर नृप रखवारा ।  
धरै यदपि धन न अधिकारा ॥  
चरवाहा बकरो हित रहई ।  
नाहि चरवाह हित वह अहई ॥  
आज लखी एक पूरनकामा ।  
इक निराभ बेठो तन कामा ॥  
ककुक दिवस जोते धरु धारा ।  
हरे दुहुन कर धरनि सरारा ॥  
हर जो लिखा सौह जब आवा ।  
भेद दाम नृप माहि मिटावा ॥  
गाढ़े भनक खोदि जो देखे ।  
धना दारिद सब एकहि लेखे ॥

(b) इनकी कविता में एक असर ऐसा होता है कि जो में जगह करे । किसी समय एक काव कहीं जाता था । उसने देखा कि एक मनुष्य बहुत व्याकुल पड़ा है । उसे देखकर उस कवि ने एक दोहा पढ़ा—

।कधौ मूर को सर लग्यो, किधौ मूर को पोर ।  
किधौ मूर को पद मुन्यो, जो अस विकल मरोर ॥

(c) ललित-पद-बन्धाम और श्रवण-मनोहर अनुप्रास-कृता निबन्धन में जयदेव की रचना अत्यन्त ही चमत्कारिणी है । मधुर पद-बन्धाम में तो बड़े बड़े कवि भी इस से निखाने हारें हैं । इन्होंने इस काव्य में अपना शक्तिशाली रचना-शक्ति और चितरञ्जक सद्भावशालित्व का एकशेष प्रदर्शन किया है ।

3. *Ether*, Who was Sankarāchārya? When did he live? 15  
What were his ideas about Godhead and Creation?

*Or*, Who was Rāmānuja? When did he live? How did his 15  
ideas about Godhead and Creation differ from those of Sankarāchārya?

4. (a) Write sentences to bring out the genders of five of the 10  
following :—

दुलार, बैर, समझ, समझद, नमाज, मौज़ा, वर्ताव, पहचान, लालच, अंस ।

(b) Give the meanings of any five of the following words 5  
and expressions :—

बलबार्ह, महाना, कृतघ्न, विलम्बो, जायाँ शिकने, रार, गिला, अगपत्य, निकष ।

(c) Use five of the following words and expressions in sen- 10  
tences of your own :—

ताड़ जाना ; छेड़ा होना ; गिरे दिन ; उमका सितारा चमका ; किसी की आँख में गिर जाना ; मिर आँख न बैठा ; गूँगे का गुड़ ; बिज्जु पात ।

5. Give an account of the life of Sūr Dās, dwelling particular- 15  
ly on the rival opinions about his birth, lineage, and blindness. Wherein his greatness lie?

6. Translate one of the following passages into Hindi :— 15

(a) The traveller played with the child the whole day long, and they were very merry. The sky was so blue, the sun was so

bright, the water was so sparkling, the leaves were so green, the flowers were so lovely, and they heard such singing birds and saw so many butterflies, that everything was beautiful. This was in fine weather. When it rained, they loved to watch the falling drops, and to smell the fresh scents. But when it snowed, that was best of all.

(b) In Japan the people build their houses chiefly of paper with a light framework of wood. The outer walls are only shutters, opened in the daytime to let in light and air. The rooms also are divided by sliding paper partitions, and the only windows are sheets of semi-transparent paper. The Japanese build their houses so slightly because of earthquakes which often shake down whole towns. Such houses are built up again when burnt down.

## SECOND PAPER.

*Candidates are required to give their answers in their own words as far as practicable*

*The figures in the margin indicate full marks.*

1. हिन्दो का वर्तमान साहित्य प्राचीन काव्य से किन प्रधान बातों में भिन्न है ? 10  
इस भेद का कारण क्या है और इसका प्रभाव क्या है ?

2. Explain any one of the following passages in Hindi :— 20

(a) तान करे निहिचै कृत सों यहि कारन कविय नाम परो है ।

जाहिर था बसुंधरा तल में यहू डेन महान प्रभाव भरो है ।

ता गुन सों विपरीत चले वृपता मर्ग लाभ कछु न लखाई ।

प्राप्त मलीन परे धिक हैं अपकीरति जासु दसौं दिसि चाई ॥

(b) सुप्रबन्ध गुणवर्णन पूर्णताका में आता है। जिस कथन को उठावे उसका सांगीपाग का कथन कविता शक्ति का एक अच्छा प्रदर्शक है। यदि मतिराम की रचना देखी जावे तो विदित होगा कि इस कवि में कितना अधिक भाव पुष्टीकरण का गुण वर्तमान है।

3. Translate any two of the following passages into English :— 20

a. मेरे मित्रों यह पहाड़ प्रदेश ऐसा चट्टानों का है कि जिन लोगों ने उधर की यात्रायें की हैं वही पहाड़ का कठिनाइयाँ जानते हैं। अपारचितों की समझ में तो वहाँ पहुँचने पर कुछ आता ही नहीं। जब वे पहाड़ में प्रवेश करते हैं तब पहिली जमीन थोड़ी थोड़ी चढ़ता हुई जान पड़ती है। फिर दूर पर बादल सा जान पड़ता है। ऐसा जान पड़ता है कि हमारे सामने दाहिने से बायें तक बादल छाया हुआ है।

(b) समय बातें कुछ देर नहीं लगती। पंद्रह दिन यों ही बीत गये। तब एक दिन महाराज ने सोचा कि देखना चाहिये जुलाहों ने कितना कपड़ा तैयार किया। पहिली तो राजा ने सोचा कि जहाँ हम खुद ही चलकर देख जायें पर मन ही मन कुछ सावधान विचार कर चुके गये। विचार करते करते उन्होंने सोचा कि हमारा दीवान अपने पद के नियंत्रण बहुत योग्य है क्यों न सब से पहिली इसी की परीक्षा ली जाए।

(c) अपने प्यारे देश को सुध करके कौन ऐसा पाषाण हृदय है जो प्रेम से विह्वल न हो जायगा ? जिसका रज में लोट लोट कर हम खेले हैं, जहाँ की गायों का हम ने मीठा मीठा दूध पिया है, जहाँ के हरे भरे खेतों का हम ने अन्न खाया है, जहाँ की हवा से हम ने अपने मधुरतम जीवन की साँसें भरी हैं, वहाँ को प्यारी याद पर क्या हम दो बूंद आँसू न चढ़ाये ।

4. Re-write the following, correcting the mistakes :—

20

बालू की महल जो सुन्दर प्रासाद का भान्ति आकास से बात बोलता था गिर चुका था चमक दमक जाता रहो था । चहल पहल की स्थान में पहिली की भान्ति चना अन्धकार छाया थी । वह व्याकुल हो छटपटा रही था । पुराना अति सामने से आकर खड़ा हो गया उसके साथ पक़्तावा भो थो ।

5. Give some rules for the formation of abstract nouns in Hindi.

15

6. Write an essay in Hindi on *one* of the following subjects :—

15

(a) हिन्दुओं की तीर्थयात्रा—इसको सामाजिक और व्यापारिक उपयोगिता ।

(b) देश-सेवा और समाज-सेवा ।

### URDU (FOR FEMALE CANDIDATES).

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### FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any *two* of the following :—

20

(a)

و فخر عرب زیب معراب و منبر  
تمام اهل مکہ کو ہمراہ لیکر  
گیا ایک دن حسب فرمان داور  
سوئے دشت اور چڑھکے کوہ پر  
یہ فرمایا سب سے کہ اے اهل غالب  
سمجھتے ہو تم مجھکو صادق کہ لاذب

(b)

وہ بجلی کا کڑکا تھا یا صوت ہادی  
 عرب کی زمین جس نے ساری ہلا دی  
 نئی اک لگن دل میں سب کے لگا دی  
 اک آواز میں سوتی بستی جگا دی  
 پرا ہر طرف غل یہ پیغام حق سے  
 کہ گونج اُتے دشت و جبل نام حق سے

(c)

سکھائی انہیں نوع انسان بہ شفقت  
 کہا یہ ہے اسلامیوں کی علامت  
 کہ ہمسایہ سے رکھتے ہیں وہ محبت  
 شب و زور پہنچاتے ہیں انکو راحت  
 وہ جو حق سے اپنے لئے چاہتے ہیں  
 وہی ہر بشر کے لئے چاہتے ہیں

2. Write a brief note on any five of the following :—

15

راہب - کافن - فاران - اصمعی - بوقییس - آمنہ

3. Re-write the following passage after correcting the mistakes that you find therein :—

10

یہاں پر یہ امر قابل لہاز ہے کہ ہمکو اس کام میں بری  
 مہارت کا قاندا حاصل ہے یہ اسوقت راضع ہوتی ہے جب ہم  
 سلنت کا مقابلہ سلنت روما سے کرتی ہیں - رومہ اپنی سلنت  
 کے قلب میں واقعہ تھا اسلئے ہر وقت اسکو چاروں طرف سے  
 خترہ لگا رہیگا - اسکے برکلاف انگلینڈ اپنی سلنت سے بالکل  
 الگ تھلگ ہے اسے مطلق اندیشہ نہیں \*

4. Either, What is اسم ? Define and illustrate its different kinds.

10

Or, What is صفت ? Enumerate its different kinds and illustrate them.

5. What parts of speech are the following?—

5

چھوٹا - روٹی - مار پیٹ - خوبصورت - سفید پتھر

6. Frame sentences to show the use of any five of the following phrases :—

10

سر پتھنا - سنگ آستان - آپے سے باہر ہونا - آسمان سے  
باتیں کرنا - بات اُٹھا رکھنا - اہنت سے اینٹ بچانا \*

7. Translate into Urdu one of the following passages :—

30

(a) Modern Delhi is not a very old city. It was built by the Emperor Shāh Jahān, the royal builder, in whose reign the Mughal empire reached its zenith. The emperor intended to have a capital worthy of the great empire over which he ruled. By the blue Jamunā he built a fortified palace for his own use, and directly opposite to it, on the other side of an open maidan, were raised the magnificent they say that five thousand men were employed for six years. The emperor intended to have the new city named Shāhjahānābād after him—domes and lofty minarets of 'the Delhi Jāmi' Masjid. To build this self, but custom is stronger than the will even of an emperor, and the modern city is commonly spoken of as Delhi. To the west of the great mosque lie the streets, bazaars, and houses of the city.

(b) When I lived a slave among the Spaniards of South America at Buenos Aires, it used to be a common thing for the people to go into the woods and hunt cattle down to supply themselves with food. The hunter mounts his fleetest horse, and takes with him a strong cord of some length; when he sees one of the wild kind, which he singles out for his prey, he pursues it at full speed, and never fails to overtake it by the greater swiftness of his horse. As he does so, he holds the cord ready, at the end of which a sliding noose is formed, and when he is at a convenient distance, throws it from him with such a certain hand, that the beast is entangled by one of its legs, after which it cannot escape.

## SECOND PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

20

جہاز نے جس وقت لنگر کنا - کک کمپنی کا ایک ملازم  
اپنے مسافروں کی خدمت گاہی کے لئے جہاز پر آیا - جہاز کنارے  
سے ذرا فاصلے پر کھڑا ہوتا ہے - اس لئے مسافروں کے اتارنے کے  
لئے کک کمپنی کی طرف سے ایک چھوٹی سی کشتی ہمیشہ  
تیار رہتی ہے ان بندرگاہوں میں جہاز سے اترنے کے وقت  
ناتجربہ کار آدمی کو سخت مصیبت پیش آتی ہے - جہاز کے  
لنگر کرنے کے ساتھ قلبی اور ملاح ہر طرف سے ٹوٹ پڑتے ہیں

اور مسافروں کو سخت پریشان کرتے ہیں - ان کے ہجوم -  
شور و نل اور اسباب کی جھینا جھپٹی میں مسافر بالکل  
بد حواس ہو جاتا ہے - بہزار دقت کنارے پر پہنچا تو  
گھنٹوں کرایہ کی بحث اور تکرار رہتی ہے - ان بلاؤں سے  
محفوظ کا عمدہ طریقہ یہ ہے کہ کک کمپنی کے ملازموں کے سوا  
اور کسی سے کچھ واسطہ نہ رکھے \*

2. Give a brief description of either Cyprus or Cairo, according to Shibli. 10

3. Either, Describe the residential arrangements for the students in Constantinople. 10

Or, Account for the restrictions imposed upon the liberty of the Press in Turkey.

4. How is اسم فاعل formed in Urdu? Illustrate with examples. 8

5. Name the حرف تشبیہ used in Urdu and make one sentence with each. 7

6. Translate into English :--

20

مطالعہ کی عادت ابتدا سے اُنکی رفیق رہی - جس زمانہ  
میں وہ فتحپور سیکری میں منصف تھے اُس وقت مولانا  
نور الحسن مرحوم آگرہ میں منصف تھے - سر سید کی اُنسے  
نہایت گہری دوستی تھی مطالعہ کے وقت کتاب کے مشکل  
مقامات جو سمجھ میں نہ آتے تھے اُنکے لئے ہر اتوار کو  
وہ گھوڑے پر سوار ہو کر فتحپور سے آگرہ میں مولانہ کے پاس  
آتے تھے - کئی برس تک بلا ناغہ اُنکا یہی دستور رہا - وہ کہتے  
تھے کہ میرا گھوڑا رستے سے ایسا آشنا ہو گیا تھا کہ ایک بار  
آگرہ سے چوتھر فتحپور اپنے تھان پر پہنچ گیا تھا \*

7. Translate into Urdu one of the following passages :—

25

(a) The King of Persia ruled over many lands which were inhabited by many millions of people, and not only were rich in all that is needful for human life, but produced a great amount of gold and silver, and every other costly thing. Yet all this did not satisfy the mind of Xerxes, who at that time was ruler of this country. He could not bear to think that the Grecians, his neighbours, were free, and refused to obey his orders, which he foolishly thought all mankind should respect; he therefore made up his mind to lead a mighty army into Greece, and to conquer the country. For this purpose he raised such a vast army, that it is almost impossible to describe it; the number of men seemed enough to conquer the whole world, and all the



forces the Grecians were able to raise would scarcely amount to a hundredth part.

(b) The Sultan entertained Aladdin at his palace, and at night, on the conclusion of the marriage ceremonies, the princess took leave of her father. She passed from the Sultan's palace to the new palace, by the flickering light of four hundred flaming torches, the sound of music and general rejoicing. Aladdin received her on the steps of his palace, and led her into a large hall, lit with a thousand wax candles, where a noble feast was served up. The princess, dazzled to see so many riches collected in one place, said to Aladdin, 'I thought, prince, that nothing in the world was so beautiful as my father's palace, but the sight of this hall alone shows me that I was wrong.'

## HISTORY

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## FIRST PAPER.

### HISTORY OF ENGLAND.

*Candidates are required to give their answers in their own words as far as practicable.*

*Candidates are permitted to attempt only THREE questions from each group.*

*All questions are of equal value.*

## GROUP A.

1. Make a comparative estimate of the effects of Rome's political and religious supremacy in Britain.

2. Give an account of England's resistance to the Danish inroads. How did the Danish invasions promote the cause of English unity?
3. Make a comparative estimate of the contribution of the barons and the churchmen to the cause of English liberty in the days of the Plantagenets.
4. What achievements of Edward I entitle him to the epithet of 'English Justinian'?
5. Show how the character of Queen Elizabeth was reflected in her policy, both home and foreign.

## GROUP B.

6. Say what you know of the great rebellion of 1642. Illustrate your answer by a sketch-map.
7. Trace the origin and growth of party government in England, indicating its merits and demerits.
8. Institute a brief comparison between Chatham and the younger Pitt as War Ministers.
9. Give a short history of the Chartist movement. How far did the Chartists foreshadow the later parliamentary reforms?
10. Give a brief account of the colonial policy of England during the Victorian Age.

## SECOND PAPER

## HISTORY OF GREECE AND ROME

*Candidates are required to give their answers in their own words as far as practicable.*

*Candidates are permitted to attempt only THREE questions from each group.*

*All questions are of equal value.*

## GROUP A.

1. Give a brief account of the Homeric poems. What information can be gathered from them as to the political and social organization of the early Greeks?
2. Institute a comparison between Lycurgus and Solon as statesmen and lawgivers.
3. Explain the full significance of the Greek victories at Marathon and Salamis.
4. Trace the origin of ostracism at Athens. How far did this method serve the best interests of the Athenian democracy?
5. What justification is there for regarding Athens as the school-mistress of Hellas?

## GROUP B.

6. Indicate the nature of the struggle between the plebeians and the patricians. How did it differ from the later conflict between the Optimates and Populares?
7. Estimate the influence of sea-power in Roman history.
8. Review the character and career of Julius Caesar. Estimate the effect of his assassination on the fortunes of the Roman Republic.
9. Bring out the salient features in the character of the ancient Romans as illustrated by the careers of Cincinnatus, Coriolanus, Regulus, and C. Terentius Varro.
10. Form an estimate of the services rendered by Diocletian to the Roman Empire.

## LOGIC

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## FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Distinguish between science and art. Is logic a science or an art? Discuss the question. 10

*Or*, Distinguish between the logical and the psychological treatment of thought.

2. *Either*, Distinguish between words and terms. Explain and illustrate the following :— 10

(a) Connative and non-connative terms.

(b) Absolute and relative terms.

(c) Contrary and contradictory terms.

**Or, Define a proposition and distinguish it from a judgment. Classify propositions according to quantity and quality, and illustrate them by appropriate diagrams.**

3. State the general rules relating to the distribution of terms in propositions. Point out the terms which are undistributed in the following propositions :— 14

- (a) Books are generally useful.
- (b) Every disease is not fatal.
- (c) The earth moves round the sun.

4. *Either*, Give the rules of immediate inference (a) by contrary, and (b) by sub-contrary opposition. Test the following immediat inferences :— 14

- (i) Sweet is agreeable; therefore bitter is disagreeable.
- (ii) A lawyer is a man; therefore a good lawyer is a good man.

*Or*, Prove by means of the rule of sub-contrary opposition that contrary propositions cannot both be true.

5. *Either*, Prove that when the conclusion is universal, the middle term can be distributed but once 14

*Or*, Briefly indicate the process by which the valid moods are determined. How is it that IE is not valid in any of the Figures whereas EI is so in all of them?

6. *Either*, Explain the logical process of reduction. Is it necessary? Reduce the mood Bramantip indirectly 14

*Or*, Give the rules for testing the validity of conditional arguments. Define a dilemma, and illustrate its principal forms. Rebut the following dilemma :—

If a pupil is fond of learning, he needs no stimulus; and if he dislikes learning, no stimulus will be of any avail. He is either fond of learning or dislikes it. Therefore a stimulus is either needless or of no avail.

7. Reduce any *four* of the following arguments to their logical form, and test their validity, pointing out the fallacies, if any, involved in them :— 16

(a) Everything is allowed by law which is morally right; indulgence in pleasures is allowed by law; therefore indulgence in pleasures is morally right.

(b) All the works of Shakespeare cannot be read in a day; therefore the play of *Hamlet*, being one of the works of Shakespeare, cannot be read in a day.

(c) He who calls you a man speaks truly; he who calls you a fool calls you a man; therefore he who calls you a fool speaks truly.

(d) None but the honest can be trusted; therefore James is not honest, for he cannot be trusted.

(e) If he says that he did not tell a lie, why, I ask, did he look abashed, as liars always do?

(f) If all the accused were innocent, they would have been acquitted; we may infer then that none were innocent, since none have been acquitted.

(g) Every hen comes out of an egg; every egg comes out of a hen; therefore every egg comes out of an egg.

## SECOND PAPER.

- \* *Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, What are the marks of inductive inference? How does induction differ from colligation of facts? 14  
*Or*, 'Induction is sometimes described as an *inverse* process of deduction.' Clearly explain and illustrate the statement.
2. *Either*, Explain observation and experiment. In what respects is experiment superior to observation? 14  
*Or*, What do you understand by elimination?  
'Observation and experiment are aids to elimination.' Explain.
3. *Either*, Enunciate and illustrate the method of difference. What advantage has this method over the method of agreement and what advantage has the latter over the former? 14  
*Or*, What do you understand by the experimental methods? Why are they so called? Indicate the uses of each.
4. Explain the relation between induction and legitimate hypothesis. When is an hypothesis said to be valid? 14
5. *Either*, Distinguish between popular and scientific explanation. Illustrate with concrete examples the different forms of the latter. 14  
*Or*, What is a Law of Nature? How does it differ from an empirical law? Explain the use for science of the discovery of empirical laws.
6. Explain the nature of scientific classification. Distinguish between classification by type and classification by definition. 14
7. Explain and illustrate the fallacies of non-observation and mal-observation. 16

## ELEMENTS OF CIVICS.

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**FIRST PAPER.**

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*All questions are of equal value.*

1. Define the terms—Law, Constitution, Right, State, and Government.
2. Discuss the main obstacles to the exercise of good citizenship.
3. Give an idea of how administration is carried on in a *mufasssil* municipality in Bengal.
4. Indicate briefly the merits and demerits of popular government.
5. Indicate with explanatory notes the powers and duties of a district board, of a municipality, of a local board, and of a union board.
6. Distinguish between a natural citizen and a naturalized citizen. Enumerate the civil rights of a citizen.
7. Differentiate between a minister and an executive councillor. Are they equal in status and pay?
8. What do you mean by dyarchy? What are the defects of such a system?
9. What do you mean by responsible government? Are the Governments of Bengal and of India instances of responsible government?
10. What steps would you suggest for the spread of primary education in Bengal?

**SECOND PAPER.**

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*All questions are of equal value.*

1. If your village has no adequate milk-supply or proper water-supply, what should be your and your neighbours' duties as villagers?
2. Distinguish between—
  - (a) value-in-use and value-in-exchange;
  - (b) fixed and circulating capital;
  - (c) productive and unproductive labour.
3. What are the principal causes of famines in India? Describe briefly the measures adopted for their prevention and relief.
4. What do you understand by 'elasticity of demand'? Consider the elasticity of demand in the case of wheat, salt, watches, and furniture.
5. Define capital and discuss its function in production.
6. Explain fully the organization of a rural co-operative credit society. What qualities are required in the villagers for its success?
7. 'The rich should be taxed proportionately more than the poor.' Why? Do all taxes obey this principle?
8. What are, in your opinion, the main causes of middle-class unemployment in Bengal? Can you suggest any remedies?
9. Discuss critically the advantages and disadvantages of division of labour in modern industry.
10. What are the main drawbacks of agriculture in India? Suggest some important measures for its improvement.

## COMMERCIAL GEOGRAPHY.

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## FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer Question 1 and any FIVE of the rest.*

*The figures in the margin indicate full marks.*

1. Draw a map of England showing the chief coal-fields. 20
2. Describe the geographical circumstances favouring the growth, and the world distribution, of sugar-beet and sugarcane. 16
3. What are the principal seats of shipbuilding in the United Kingdom, and what are the geographical advantages for the industry enjoyed by them? What geographical circumstances tended to deprive the Thames of the high rank it once held in this industry? 16
4. How do you account for— 16
  - (a) the excess of imports over exports in the case of Great Britain;
  - (b) the excess of exports over imports in the case of India?
5. What are Hudson Bay, the Malay Peninsula, and the Rand? State anything you know about the geographical importance of each. 16
6. Compare Scotland and England as regards (a) physical features, (b) production, and (c) distribution of population. 16
7. Compare and contrast those parts of Australia and South America which lie within common latitudes. 16
8. State the situation and describe the reasons for the importance of any five of the following:—(a) Buenos Ayres, (b) Chicago, (c) Danzig, (d) Durban, (e) Hobart, (f) San Francisco, (g) Sydney, (h) Vancouver, and (i) Yokohama. 16

## SECOND PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer Question 1 and any FIVE of the rest.*

*The figures in the margin indicate full marks.*

1. Draw a map of India and Burma showing railways, rivers, and canals. 20
2. Account for the variety in the distribution of rain-fall in India, and show its effect on the chief products. 16
3. Describe fully the natural hindrances to communication in the peninsular portion of India, both internal and external, and state how they have been sought to be overcome. 16

4. Compare the north-east and north-west of India proper in respect of (a) physical features, (b) means of communication, (c) climate, (d) agricultural production, and (e) conditions affecting that production. 16
5. What are the monsoons? Describe briefly their effect on the economic condition of India. 16
6. What are the necessary conditions for the successful cultivation of cotton? Describe carefully the regions where it is produced in India and the measures adopted for improving the quality and the quantity. 16
7. Describe the forest resources of India and their importance. 16
8. Describe briefly India's trade with Japan. Do you know of any recent measure likely to affect this trade? 16

### COMMERCIAL ARITHMETIC AND BOOK-KEEPING.

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                          Mr. NARENDRANATH SARKAR, M.A.

#### FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Any EIGHT out of the following twelve questions may be attempted.*

*All questions are of equal value.*

1. If  $T$  per cent. be the rate of profit on the turnover and  $P$  per cent. that on the cost of production, show that  $\uparrow \frac{100 P}{100 + P}$ .

Hence show that a profit of 25 per cent. on the cost of production is equivalent to a profit of 20 per cent. on the turnover.

2. A man in business loses in his first year 5 per cent. of his capital, but in the second year he gains 6 per cent. of what he had at the end of the first year, and his capital is now Rs. 350 more than at the commencement. Find his original capital.

3. A man, trying to forecast the result of an election thought that there would be eight Swarajists to every Liberal, and that the numbers of Swarajists and Independents would be as twelve to seven (assuming there are only these three parties in the election). If the result had come out like this, the anti-Independent majority would have exceeded by twenty-four the clear Swarajist majority. How many Swarajists would there have been?

4. A property changed hands three times, each agent who sold it charging 1 per cent. as commission. If each time it was sold for the net amount obtained at the previous sale, calculate to the nearest rupee its original value if the third sale realized Rs. 1,00,000 net.

5. A motor is following a cyclist along a road which runs by the side of a railway. The motor is going at 25 miles per hour and the cyclist at 10 miles per hour. A train completely passes the motor in 5 seconds, and



afterwards completely passes the cyclist in 2 seconds, the interval between the time when the train is clear of the motor and the time when it is clear of the cyclist being 32 seconds. How far ahead will the train be when the motor overtakes the cyclist?

6. A school with 78 boys and 72 girls on the books meets 432 times in the year. If each boy loses one meeting in 9, and each girl one in 8, find the average attendance of each sex for the year.

7. In the winding up of a company, the following payments are 'preferential,' that is to say, they must first be paid out of the available assets before the other creditors receive any payment :—

(a) All revenue, taxes, cesses, and rates, whether payable to the Crown or to a local authority, due from the company at the date of commencement of the winding up and having become due and payable within twelve months next before that date.

(b) All wages or salary of any clerk or servant in respect of service rendered to the company within the two months next before the said date, not exceeding one thousand rupees for each clerk or servant.

(c) All wages of any labourer or workman not exceeding five hundred rupees for each, whether payable for time- or piece-work, in respect of services rendered to the company within the two months next preceding that date.

The realized value of the assets of a company in liquidation amounts to Rs. 2,00,000. The creditors, amounting to Rs. 4,12,000 include—

(a) Cesses and rates payable to the Calcutta Corporation Rs. 2,000.

(ii) Salary for three months to five clerks at the rate of Rs. 550 each per month.

(iii) Wages to ten foremen for the last three months at the rate of Rs. 300 each per month.

Find the amount received by—

(1) The Calcutta Corporation.

(2) Each clerk.

(3) Each foreman.

(4) Each of the other creditors.

8. Find the average due date for the following payments :—Rs. 500 payable on 1st January; Rs. 1,500 payable on 18th January; Rs. 700 payable on 11th March; Rs. 1,100 payable on 3rd May; Rs. 1,800 payable on 30th June.

9. A man has Rs. 6,680 stock in the 4 per cents. at 98. When the stock has fallen 2 per cent. he transfers his capital to the  $3\frac{1}{2}$  per cents. at 83 $\frac{1}{2}$ . Find the alteration of his income to the nearest anna.

10. The electric resistance of a wire of given material is directly proportional to its length and inversely proportional to the square of the diameter of its circular cross-section. Calculate the length and diameter of a wire which is to have double the resistance, but only one-third the weight, of a wire of the same material 53 feet long and 0.024 inch diameter.

11. A man borrows Rs. 1,000 on the understanding that it is to be paid back with interest in four equal instalments at intervals of six months, the first payment to be made six months after the money was borrowed. Calculate the amount of each instalment, reckoning compound interest at  $2\frac{1}{2}$  per cent. per half-year.

12. A manufacturer has priced certain pieces of furniture. The largest sells at Rs. 200 and the smallest at Rs. 90. He wishes to alter the prices so that the largest will sell at Rs. 260 and the smallest at Rs. 60. Assuming that the new price  $P$  and the old price  $Q$  are connected by the relation  $P = a + bQ$ , find the new prices of the pieces of furniture valued at Rs. 125 Rs. 150, and Rs. 175.

# COMMERCIAL ARITHMETIC AND ELEMENTS OF BOOK-KEEPING.

## SECOND PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Any EIGHT out of the following TWELVE questions may be attempted.*

*All questions are of equal value.*

1. Distinguish between—

(a) Floating charge on Assets and Charge on Floating Assets;

(b) Income and Expenditure Account and Receipts and Payments Account;

(c) Bill and Receipt;

(d) Gross Profit and Net Profit.

2. What do you understand by a 'Three Columned Cash Book'? Give a ruling for one with some imaginary specimen entries.

3. What is the function of a Balance Sheet? What is your idea about a 'Balance Sheet prepared on the Cash basis'? Do you find any fault with the term? Explain carefully.

4. What is an Account Current? Give an illustration with imaginary figures and containing at least four items on the debit side and an equal number on the credit side.

In some Bank Pass Books your account appears as 'X in Account Current with Alpha Bank, Ltd.' and in others as 'Beta Bank Ltd., in Account Current with X.' Explain each method of writing the account.

5. Pass suitable Journal entries for the following:—

(a) Interest on Current Account with Lloyds Bank, Rs. 13/5, has not been brought into account. Do this.

(b) Rs. 500/- is to be written off Sundry debtors.

(c) A and B are in partnership sharing profits and losses in the ratio of 1 : 2. It is decided to introduce Goodwill and Rs. 30,000 is to be debited to this account. Do this.

(d) Fire insurance premium at the rate of Rs. 900 a year has been paid in advance for five months. Make the necessary adjustment.

(e) Establishment charges to the extent of Rs. 3,000 remain unpaid at the date of closing.

6. A started in business with a capital of Rs. 20,000. His subsequent transactions for a year were as follows:—

Purchases Rs. 12,000, of which goods worth Rs. 2,300 were returned; sales Rs. 10,700, of which goods worth Rs. 1,200 were returned by customers; carriage inwards Rs. 200 and outwards Rs. 170; salaries to staff Rs. 750; rent & rates Rs. 800; discount received on purchases at 5 per cent. The value of stock in hand at the close of the year was Rs. 3,000. Prepare a Trading and Profit & Loss Account based on the above data.

7. In a certain manufacture the costs were as follows:—

Raw Materials	...	...	...	Rs. 23,000
Wages	...	...	...	" 25,000
Other Expenses	...	...	...	" 27,000

5,000 units of the commodity were manufactured which sold for Rs. 100,000.

During a subsequent period, cost of raw materials increased by 5 per cent., wages by 50 per cent., other expenses by 10 per cent. Find

the price at which 1,000 units of the commodity must be sold now to yield the same rate of profit on the cost of production as in the previous case.

8. On 31 December, 1929, the Balance Sheet of A stood as follows :—

	Rs.		Rs.
Sundry Creditors ...	35,000	Land & Building ...	50,000
Loans ...	60,000	Furniture ...	15,000
Capital ...	95,000	Plant & Machinery ...	40,000
	—	Sundry Debtors ...	65,000
	190,000	Cash ...	18,000
			—
			190,000

B agrees to take up the business of A on the following terms :—

(a) Sundry Creditors & Loans are to be taken at their book values.  
 (b) Land and Building is to be taken at Rs. 60,000; Furniture is to be taken at the book value; Plant & Machinery is to be taken at Rs. 45,000; Rs. 5,000 is to be written off the Sundry Debtors.

(c) Rs. 100,000 is to be paid to A as the purchase consideration.

Assuming that B brings in cash Rs. 1,00,000 to pay off the purchase consideration, draft the initial Balance Sheet of B.

9. A, B and C are partners sharing profits and losses in the ratio of 3 : 2 : 1, and their capitals are Rs. 10,000, Rs. 5,000, and Rs. 3,000 respectively.

On 31 December, 1929, the partnership is dissolved. Assets are to be realized gradually, but it is decided that the net realization for every month is to be distributed amongst the partners at the end of the month. Part of the assets were realized in January, 1930, which, after payment of all liabilities, left a balance of Rs. 3,000. Show what each partner will get.

10. Explain the difference between a Trading Account and a Profit & Loss Account.

Which of the following items belong to the former and which to the latter account :—(a) Carriage Outward; (b) Carriage Inward (c) Wages; (d) Salary of Sales Manager; (e) Advertisement; (f) Insurance; (g) Discount Allowed; (h) Returns Outward?

11. The following balances have been extracted from the books of a firm at 31 December, 1929 :—

Capital Accounts : Senior Partner Rs. 12,000, Junior Partner Rs. 7,000; Current Accounts : Senior Partner Rs. 754 (Cr.), Junior Partner Rs. 72 (Dr.); Drawings : Senior Partner Rs. 1,264, Junior Partner Rs. 875; Wages (Workshop) Rs. 4,268; Trade Expenses (Workshop) Rs. 1,374; Office salaries Rs. 1,843; Insurance : Workshop Rs. 48, Office Rs. 26; Rent & Taxes : Workshop Rs. 1,256, Office Rs. 226; Fuel & Light : Workshop Rs. 374, Office Rs. 32; Advertising Rs. 2,670; Purchases Rs. 36,343 and Returns Rs. 721; Sales Rs. 58,194 and Returns Rs. 392; Carriage Inwards Rs. 215; Carriage Outwards Rs. 319; Discount Rs. 72 (Cr.); Travellers' Salaries & Commission Rs. 3,764; Sundry Creditors Rs. 4,282; Sundry Debtors Rs. 6,842; Bank Overdraft Rs. 802; Cash in hand Rs. 133; Workshop Plant & Fixtures Rs. 1,860; Office Furniture Rs. 850; Motor Vans Rs. 1,524; Bad Debts Reserve (31.12.28) Rs. 100; Stock (31.12.28) Rs. 17,875.

Prepare a Trial Balance.

12. Assuming that the value of the stock in hand as on 31 December, 1929, is Rs. 20,000, prepare a Trading and Profit & Loss Account on the basis of the figures in Question 11 above.

# I.A. and I.Sc. Examinations,

1931

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## FIRST PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Solve  $x + y = a + b$ ,  $\frac{a}{x} + \frac{b}{y} = 2$ . 6

If  $\alpha$  and  $\beta$  be roots of  $x^2 + px + q = 0$ , show that  $\frac{\alpha}{\beta}$  is a root of the equation 6

$$qx^2 - (p^2 - 2q)x + q = 0.$$

Or, If  $x$  vary as  $y$ , when  $z$  is constant, and  $x$  vary as  $z$ , when  $y$  is constant, show that  $x$  varies as  $yz$ , when both  $y$  and  $z$  are variable. 6

Two globes of gold have their radii equal to  $r$  and  $r'$ ; they are melted and formed into a single globe. Find its radius. (The volume of a globe varies as the cube of the radius.) 6

2 Find the number of permutations of  $n$  things, taken all at a time, when  $p$  of them are exactly alike of one kind,  $q$  of them exactly alike of a different kind, and the rest all different. 6

Out of 9 Swarajists and 5 Ministerialists, how many different committees can be formed, each consisting of 6 Swarajists and 3 Ministerialists? 6

3. *Either*, Obtain the term free from  $x$  in the expansion of 6

$$\left(x + \frac{1}{x}\right)^{2n}.$$

If  $y = 2x + x^2 + 4x^3 + \dots$  express  $x$  in a series of ascending powers of  $y$ , up to the third power.

Or Write down the expansion of  $e^x$  and  $\log_e(1+x)$  in ascending powers of  $x$ . 6

If  $y = x - \frac{x^2}{2} + \frac{x^3}{3} - \dots$ , show that  $x = y + \frac{y^2}{2} + \frac{y^3}{3} + \dots$  6

4. Prove that 6

$$\sin(A-B) = \sin A \cos B - \cos A \sin B,$$

where  $A$  and  $B$  are positive acute angles, and  $A$  is greater than  $B$ .

Express  $\sin 2A$  and  $\cos 2A$  in terms of  $\tan A$ . 6

5. *Either*, In any triangle, prove that 6

$$\tan \frac{B-C}{2} = \frac{b-c}{b+c} \cot \frac{A}{2}.$$

In a triangle, if 6

$$b = 2.25, c = 1.75, A = 54^\circ,$$

find  $B$  and  $C$ , having given

$$\log 2 = 0.301030, \quad L \cot 27^\circ = 10.292834,$$

$$L \tan 13^\circ 47' = 9.389724, \quad L \tan 13^\circ 48' = 9.390270.$$

Or, Draw the graph of  $y = \cos x$ , from  $x = -10^\circ$  to  $x = +180^\circ$ , tabulating at intervals of  $10^\circ$ . (Mathematical tables may be used.) 14

6. In a parabola, prove that the subtangent is bisected at the vertex. 6
- Prove that the locus of the foot of the perpendicular, drawn from the focus upon a tangent to a parabola, is the tangent at the vertex. 6
7. Either, In an ellipse, prove that 10
- $$PN^2 : AN \cdot A'N = CB^2 : CA^2.$$
- Prove that the greatest value of  $PN$  is  $CB$ . 4
- Or, In an ellipse, prove that the locus of middle points of a system of parallel chords is a straight line passing through the centre. 10
- Show that the line joining the points of contact of two parallel tangents to an ellipse passes through the centre. 4
8. Either, Of all straight lines drawn from an external point to a plane, the perpendicular is the shortest; of obliques drawn from the given point, those which cut the plane at equal distances from the foot of the perpendicular are equal. 6
- Show that the angle made by an oblique to a plane with its projection is less than that which it makes with any other line meeting it in that plane. 6
- Or, If a straight line outside a given plane is parallel to any straight line drawn in the plane, it is parallel to the plane itself. 6
- Show that, through a given point  $P$ , a plane may be constructed parallel to each of two lines  $AB$  and  $CD$ , which do not lie in the same plane. 6

## SECOND PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Not more than SEVEN questions are to be attempted.*

*Two marks are reserved for NEATNESS.*

*The figures in the margin indicate full marks.*

1. Define *uniform speed* and *uniform velocity*, and distinguish between them, giving illustrations, one of each. 7

A body moves in a straight line  $AB$ , and its distance from  $A$  after  $t$  seconds is  $s$  feet. If  $A$  is fixed, and  $s$  and  $t$  are connected by the relation 7

$$s = 13.35 + 44t,$$

find the velocity of the body per hour.

2. State Newton's second law of motion, and deduce the formula  $P = mf$ . 7

A particle moves through 80 feet in four seconds, from rest, under a uniform force of 45 poundals. Find its mass. 7

3. State and prove the parallelogram of velocities. 7

A boat is rowed at right angles to the course of a river twice as fast as the river flows. It meets the opposite shore  $1\frac{1}{2}$  miles below the starting-point. What is the breadth of the river? 7

4. Prove that the path of a projectile in vacuo is a parabola. 7
- Particles are projected from a given point with velocities of the same magnitude in different directions on a vertical plane. Prove that at any particular instant they will lie on a circle. 7
5. Define Work. Find the work done in dragging a mass  $m$  up a smooth inclined plane to a height  $h$  against gravity. 7
- Show that if a mass  $m$  is allowed to slide from rest, down a smooth inclined plane, the sum of the potential and kinetic energies at every instant is the same. 7
6. A smooth sphere of mass  $m$ , whose co-efficient of restitution is  $e$ , impinges obliquely on a fixed smooth plane. 14
- Find (i) the direction and magnitude of the velocity after impact, and (ii) the impulse of the action of the plane.
7. Enunciate and prove the triangle of forces. 7
- Three forces, each of magnitude  $P$ , act along the sides  $BC$ ,  $CA$ ,  $AB$  of an equilateral triangle. Find the resultant. 7
8. Find the resultant of two, equal and like parallel forces acting on a rigid body. 7
- One end of a heavy straight uniform rod rests on a smooth horizontal table, while the other end is above the table and is attached to one extremity of a light inextensible string passing over a smooth pulley and supporting a weight  $W$  at the other extremity. Draw a neat diagram indicating a position of equilibrium of the system when the rod is not vertical, and find the weight of the rod. 7
9. Find the centre of gravity of three particles of equal mass, placed at the angular points of a triangle, and deduce from this the fact that the three medians of a triangle have a common point. 7
- If the centre of gravity of three particles placed at the angular points of a triangle coincide with the common point of the three medians, show that the three particles are of equal mass. 7
10. State the laws of friction. 4
- A weight  $P$  rests on a rough inclined plane and is just on the point of slipping down. On applying a force  $P$  parallel to the plane, upwards, the weight is just on the point of moving up. Find the co-efficient of friction and the angle of the plane. 10
11. Define a couple. Prove that the resultant of a couple and a force is a force. 7
- Show that a system of coplanar forces, which is not in equilibrium, is reducible to a single force or a couple. 7
12. Describe the first system of pulleys with a neat diagram and calculate its mechanical advantage. (The weights of the pulleys may be neglected.) 14
13. Prove that the algebraic sum of the moments of two forces about a point in their plane is equal to the moment of their resultant. (The lines of action of the forces are supposed to meet.) 7
- Two forces act on a body, which can move round a fixed point, and the body remains at rest. Show that the moments of the forces round the point are of equal magnitude. 7
-

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## FIRST PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions are of equal value. Attempt not more than six questions, of which at least two must be from each of the GROUPS A and B and one from GROUP C.*

## GROUP A.

1. State where a body weighs the more—at the Poles or at the Equator. Give reasons. How do you prove his difference in weight experimentally?

2. State and prove Boyle's Law, taking the necessary precautions.

A tube six feet in length closed at one end is half filled with mercury and is then inverted with its open end just dipping into a mercury trough. If the barometer stands at 30 inches, what will be the height of the mercury inside the tube?

3. Explain how you would determine the specific gravity of a solid by a specific gravity bottle.



80.3 gm. have to be placed on the pan of a hydrometer to sink it to the mark in water and 6.8 gm. only in alcohol. If the hydrometer weighs 200 gm., what is the specific gravity of alcohol?

4. State Pascal's Law regarding the transmission of pressure in a liquid and describe a suitable experiment to verify it in the laboratory.

At what depth below the surface of water will the pressure be equal to two atmospheres if the atmospheric pressure is 1 megadyne ( $10^6$  dynes) per sq. cm.?

$$(g = 981 \text{ cm./sec.}^2)$$

### GROUP B.

5. Define the co-efficient of cubical expansion of a solid. Does it differ when the lengths are measured in centimetres or feet?

Describe briefly an experiment for determining the co-efficient of expansion of a solid.

A clock which keeps correct time at  $25^\circ \text{C}$ . has a pendulum rod made of brass. How many seconds will it gain per day when the temperature falls to the freezing-point? (Co-efficient of linear expansion of brass is 0.000019).

6. Briefly explain the following :—

(a) Why is it easier to float in sea water than in fresh water?

(b) Why do two bits of ice when pressed together form one mass?

(c) How are echoes produced?

(d) When a piece of iron wire gauze is held over a flame, the flame does not rise above it. Why?

(e) Why does water boil at a lower temperature on the top of a hill?

7. Explain clearly the meaning of the statements that 'the specific heat of ice is 0.5,' 'the latent heat of water is 80.'

Find the result of mixing 2 lb. of ice at  $0^\circ \text{C}$ . with 3 lb. of water at  $45^\circ \text{C}$ .

Describe any method of determining the latent heat of steam in the laboratory.

8. What are the different methods for the transmission of heat from point to point? Clearly explain their difference with suitable examples.

### GROUP C.

9. What are stationary waves?

Give an account of the nodes and antinodes formed in open and closed pipes.

Two open pipes are sounded together, each note consisting of its fundamental together with two upper harmonics. One fundamental note has 256 vibrations per second, the other 170. Would there be any beats produced? If so, how many per second?

10. Distinguish between pitch, quality, and loudness. What characteristics of vibration determine the pitch and loudness of a musical note?

A body vibrating with a constant frequency sends waves 10 cm. long through a medium A and 15 cm. long through another medium B. The velocity of the waves in A is 90 cm. Find the velocity in B.

## SECOND PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions are of equal value. Attempt six questions, of which at least two must be from each of the GROUPS A and C and ONE from GROUP B.*

### GROUP A.

1. What is the 'intensity of illumination' of a surface? Prove that it varies inversely as the square of the distance from the source of light.

A standard candle and a gas flame are placed 6 ft. apart, the gas flame being of 4 candle-power. Where must a screen be placed on the line joining the candle and gas-flame so that it may be equally illuminated by each of them?

2. Obtain a formula connecting together the positions of an object and its image formed—real or virtual—by direct refraction through a convex lens.

If an observer's eye be held close to a convex lens of 3 cm. focal length to view an object at a distance of 2.5 cm. from the lens, show that the magnifying power is 6. Illustrate your answer by a neat diagram.

3. Describe a telescope. Explain by means of a neat diagram how the magnification is produced.

In what way is an opera-glass different from an astronomical telescope?

4. What is a spectrum? What apparatus do you require and how would you arrange it to produce a pure spectrum? Give a figure showing the path of the rays.

Discuss in general terms the spectrum produced by the following :—  
(a) when the sun is used as a source of light, (b) when the light is produced by an incandescent solid, (c) when the flame of a Bunsen burner is coloured by sodium salt.

### GROUP B.

5. What do you mean by the potential of a conductor? A conductor of capacity 75 is charged to potential 20, and is then made to share its charge with a second conductor of capacity 25. What will be the final charge and potential of each?

6. Define a unit magnetic pole. How would you experimentally determine the pole of a magnet?

Explain what you mean by the following :—

(a) The earth's horizontal intensity at Calcutta is equal to 0.33 C.G.S. units.

(b) The declination of a place is  $30^\circ$  E.

(c) The inclination is  $25^\circ$ .

### GROUP C.

7. Describe the construction and action of a tangent galvanometer.

Explain clearly how a tangent galvanometer can be converted into a sine galvanometer.

8. Describe a Leclanché cell and explain its action.

A galvanometer of 45 ohms resistance is shunted by a shunt of 5 ohms. Find the equivalent resistance and the current flowing through the galvanometer when a difference of potential of 22.5 volts is maintained between its terminals.

9. State Joule's Law regarding the development of heat in an electrical circuit. Describe an experiment to verify it.

A conductor carrying a current divides into two branches whose resistances are in the ratio of 4 to 5. Compare the amounts of heat generated in the branches.

10. Give a brief account of the principal phenomena of electro-magnetic induction.

Describe the construction and action of an induction coil, drawing a neat diagram.

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## FIRST PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Attempt six questions only, of which Question 5 is compulsory.*

*The questions are of equal value.*

1. What do you understand by the law of definite proportions? How would you prove it? A metal is found to give two oxides; on heating one

gram of each in a current of hydrogen, 0.798 and 0.888 grams of the metal were obtained respectively. Show that the results are in agreement with the law of multiple proportions.

2. Explain with illustrations what you understand by the following :— (a) dissociation, (b) catalysis, (c) hardness of water, (d) dialysis, (e) electro-chemical equivalent

3. What is the most important source of phosphorus? How is phosphorus obtained from this source? Mention the chief properties and uses of phosphorus.

4. What happens when hot and cold nitric acid of different strengths acts upon the following :—zinc, copper, tin, and mercury?

5. 1.524 grams of ammonium chloride were dissolved in water, and 50 c.c. of normal potassium hydroxide solution were added to it. The total solution was boiled till ammonia ceased to be evolved, and was then neutralized with 30.95 c.c. of normal sulphuric acid solution. Calculate the percentage of ammonia in the sample of ammonium chloride.

6. Give an account of the extraction of aluminium from its ores. Describe the properties and uses of this metal.

7. Give the chemical name and formula of each of the following substances :—(a) alum, (b) borax, (c) water glass. How are they prepared, and what are their uses?

8. What do you understand by the terms 'reducing' and 'oxidizing' agents? Give illustrations with equations.

## SECOND PAPER

*Attempt six questions only, of which Question 5 is compulsory.*

*The questions are of equal value.*

1. Establish the relation between (a) the temperature, pressure, and volume of a gas, (b) the density and molecular weight of a gas.

2. Describe Moissan's method for the preparation of fluorine. Compare the properties of fluorine with those of the other halogens.

3. By what experiments would you prove that (a) a silver coin contains silver and copper, and (b) brass contains zinc and copper? Describe a method by which you could obtain pure silver from a silver coin.

4. Describe the preparation, properties, and uses of hydrogen peroxide. How is it detected?

5. A specimen of limestone contains 60 per cent. of calcium carbonate. Calculate the amount of stone which will be required to generate just sufficient quantity of carbon dioxide to convert completely one litre of a normal solution of caustic soda into carbonate.

[Ca = 40, Na = 23.]

6. Explain with equations the reactions taking place in the following cases :—

- Aluminium is heated with caustic soda solution.
- An electric current is passed through copper sulphate solution between copper electrodes.
- An electric current is passed through sodium chloride solution between carbon electrodes.
- Chlorine is passed through milk of lime.
- Potassium chlorate is treated with strong hydrochloric acid.

7. Describe the method of manufacturing pig-iron from an iron ore. Give sketches where necessary. What is the difference between pig-iron, steel, and wrought iron?

8. Describe what happens when sulphuretted hydrogen is passed into solutions of (a) caustic potash, (b) stannic chloride, (c) nitric acid, and (d) sulphurous acid

## PHYSIOLOGY

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### FIRST PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*All questions carry equal marks.*

1. Describe the chemical and physical properties of protoplasm.
2. Describe the histological structure of hyaline cartilage. Give a diagram.
3. Mention the general properties of the blood.
4. Describe the course of the circulation of the blood
5. Describe the structure of the arm considered as a mechanical appliance.
6. Define—(a) tidal air, (b) vital capacity, (c) tissue respiration, and (d) asphyxia.
7. What are the evils of over-eating?
8. Describe the action of gastric juice.

### SECOND PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*All questions carry equal marks.*

1. What is the composition of bile?
2. What are the functions of the small intestine?
3. What is the composition of urine?
4. Describe the sources of animal heat.

6. Mention the cranial nerves, indicating briefly the function of each.
6. What are the effects which follow the section of the posterior nerve root between the cord and the ganglion?
7. Describe the phenomenon of visual accommodation.
8. What are short sight and long sight?

## BOTANY

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MR. ATULCHANDRA DATTA, M.Sc.

## FIRST PAPER

*Candidates are required to give their answers in their own words  
as far as practicable.*

*Answer any FIVE of the questions.*

*The figures in the margin indicate full marks.*

1. Describe the modified forms of stem for vegetative propagation. Give an example in each case with neat sketches.
2. What is a *sporophyll*? Describe the nature and arrangement of the sporophylls of *Equisetum*. Give neat sketches. 20
3. What is *chlorophyll*? What is its work? How can you demonstrate the influence of light on the function of chlorophyll? 20
4. How would you recognize plants belonging to the Natural Order *Malvaceae*? 20
5. What are hypogynous, perigynous, and epigynous flowers? Give one example of each, with neat sketches. 20
6. Describe the process of formation of *Bark* in a dicotyledonous plant. Give neat sketches. 20
7. Explain the breathing process of plants. Why is it unwholesome to keep plants in rooms in which we sleep? 20

## SECOND PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any FIVE of the questions.*

*The figures in the margin indicate full marks.*

1. Explain fully how a plant gets rid of its surplus water. 20
2. What are the chemical elements found in the plant-body? 20
- How do the plants obtain them?
3. How does a Root-hair differ from a Rootlet structurally and physiologically? 20
4. Describe fully, with neat sketches, the life-history of *Mucor*. 20
4. Describe fully, with neat sketches, the life-history of *Mucor*. 20
- Labiatae*, and give an example.
6. State the general principles of classification of plants. 20
7. What is an inflorescence? Describe the various types of inflorescences. 20

## GEOGRAPHY

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## FIRST PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only SIX questions are to be attempted. Question 1 is obligatory.*

*The figures in the margin indicate full marks.*

1. Discuss the different ways in which mountains are formed and illustrate your answer with Indian examples. 20
2. Explain the following terms:—*isobar*, *isotherm*, *cyclone* and *anticyclone*. 16
- Why is it that an anticyclone generally brings dry cooler weather and a cyclone rain?
3. What is an earthquake, and how is it caused? 16
- Why is it that earthquakes in many cases originate along a few well-defined lines on the earth's surface? Where roughly are these lines? How are records kept of earthquakes in a meteorological office?
4. Draw a diagram showing the wind-system of the world. Does any modification of the wind-system take place? Give reasons for your answer. 16
5. What are the causes that determine the rainfall of an area? How is it measured? Why have some places more rainfall than others at different times of the year? Illustrate your answer with examples from Africa. 16

6. Give an account of the activity of a river from its source to its mouth. 16
7. What do you know of the 'Challenger' expedition? 16  
Give an account of the marine deposits and explain how they may be classified.
8. Give an account of the different faunal realms into which the earth has been divided and state the characteristic features of each. 16

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## SECOND PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only six questions are to be attempted. Question 1 is obligatory.*

*The figures in the margin indicate full marks.*

1. What are the principal difficulties confronting the explorers in the Himalayas and why are these difficulties greater here than in other countries? Illustrate your answer by anything you know of the recent expeditions to Mount Everest and Kinchinlunga. 20
  2. Give a short description of the chief railway systems of India. What are the principal commodities which they carry? What are the ports to which they carry these commodities, and to what parts of the world are they shipped? 16
  3. What are the chief producing regions for the following :— (a) rice, (b) rubber, (c) wheat, (d) tea, and (e) oil? 16
  4. What are the principal trade routes crossing the land boundaries of India? Where do they lead, and what traffic do they carry? 16
  5. Describe the different methods of map projection and state the advantages as well as the disadvantages of these methods. 16
  6. Draw a map of Australia and divide it into natural economic regions and give full reasons for the division you adopt. 16
  7. Draw a map of Europe and indicate on it the boundaries of the different countries as they were recognized before the great European war and as they are recognized now. 16
  8. Write short notes on the following :—Alaska, the Barbary States, Brazil, the lakes of North America, the industries of Japan, the political divisions of the Chinese Empire, the States of Indo-China under the British control, and the manufacturing centres of Germany. 16
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# B. A. Examination,

1931

## ENGLISH

*Paper-Setters—* { MR. MAHMUD HASSAN, B.A. (Oxon.).  
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### FIRST HONOURS PAPER.

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Can you discover any law by which the clash of good and evil in *Macbeth* may be shown to be regulated? 18

*Or*, Show that it is less often wickedness than weakness that breaks the hearts of modern tragedy.

2. Examine one of the following critical remarks :— 15

(a) *The Tempest* is one of the most original and perfect of Shakespeare's productions.

(b) No play, perhaps, more perfectly combines intellectual satisfaction with imagination than *The Tempest*.

3. *Either*, 'Where comedy uses surprise tragedy uses suspense and irony in the exposition of the plot.' 15

Discuss this, with special reference to *Macbeth* and *The Tempest*.

*Or*, What is your impression, from the two plays prescribed, regarding the relation between the drama and the theatre in Shakespeare's time?

4. *Either*, Is it possible to divide by means of tendencies or characteristics the poets included in Binyon's *Golden Treasury* into well-defined groups? 10

Or, How far is the temper of the Victorian age reflected in Clough, Samuel Butler, and T. E. Brown?

5. Show by a critical analysis to what extent any *two* of the following poems represent the genius or art of their author :—(a) *The Huntsmen's Chorus*, (b) *Thyrsis*, (c) *The Portrait*, and (d) *The Laboratory*. 16

6. Explain, with reference to the context, any *two* of the following extracts, noticing peculiarities, if any, of thought or style :— 20

(a) How he solicits heaven,  
Himself best knows : but strangely-visited people,  
All swollen and ulcerous, pitiful to the eye,  
The mere despair of surgery, he cures,  
Hanging a golden stamp about their necks,  
Put on with holy prayers : and 'tis spoken,  
To the succeeding royalty he leaves  
The healing benediction.

(b) He being thus lorded,  
Not only with what my revenue yielded,  
But what my power might else exact, like one  
Who having unto truth, by telling of it,  
Made such a sinner of his memory  
To credit his own lie, he did believe  
He was indeed the duke.

(c) Soaring through wider zones that pricked his scars  
With memory of the old revolt from Awe,  
He reached a middle height, and at the stars,  
Which are the brain of heaven, he looked and sank.  
Around the ancient track marched, rank on rank,  
The army of unalterable law.

(d) There to me thro' all the groves of olive in the summer glow,  
There beneath the Roman ruin where the purple flowers grow,  
Came that 'Ave atque Vale' of the poet's hopeless woe,  
Tenderest of Roman poets nineteen hundred years ago.

## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Discuss *one* of the following quotations, illustrating your answer by references to your text :— 18

(a) 'Burke is probably the only British politician whose speeches and pamphlets made for immediate results have given him immortality.'

(b) 'We are taken captive not so much by his reasoning, strongly as that moves to its conquest, as by the generous warmth that steals out of him. There is a tonic breath of generous warmth in what he writes—the fine sentiment of a pure man.'

2. Explain any *two* of the following aphorisms of Burke, and state his application of them :— 16

(a) Liberty is a general principle.

(b) We are not disarmed by being disencumbered of our passions.

(c) This moral levelling is a servile principle.

3. *Either*, Examine the following statement and its bearing on Matthew Arnold's essay on Marcus Aurelius :—' Matthew Arnold was a heathen and he knew the heathen. He was more at home among the heathen than in Christian society. He knew the heathen better than the Christian, and having more affection for him knew his difficulties better than the Christian.' 16

Or, Amplify the following, pointing out the extent to which it is true of Carlyle's essay on History :—' The great merit of Carlyle as a writer and the great pleasure which his writings give, arise from their suggestive character. He is always furnishing hints for thought.'

4. Explain, with reference to the context, any *two* of the following :— 16

(a) What a difference there is between the minute and finished delicacy of Rydal Water and the rough simplicity of Loch Katrine! . . . And this is wise, for there is beauty in the North as well as in the South.

(b) Is the tongue of the Hottentot or Esquimaux to be made the measure of the genius of Plato, Pindar, Tacitus, St. Jerome, Dante, or Cervantes?

(c) These were the dragons of the garden but for such joys of paradise we could have faced the Terror of Jamaica himself.

5. *Either*, Compare and contrast Samuel Pell (Barry Pain's *Model Man*) and Aristide Pujol (W. J. Locke's *The Adventure of the Kind Mr. Smith*). Do they obtain the sympathy of the reader? If so, what is the explanation? Do you agree with the opinion that they succeed principally on account of the smaller rogues with whom they come in contact? Give reasons for your answer. 20

Or, Write an appreciation of E. M. Forster's *Celestial Omnibus* as a short story. What do you conceive to be its central idea? Can you explain why things invisible to Mr. Bous, who described himself as a lover of Poetry and Art, were visible to the little boy?

6. *Either*, A great critic has observed that: ' the English Bible has had a large share in determining our very conception of literary style.' 16

Is this true of the Epistles, and if so, to what extent?

Or, ' The Epistle of St. James is a miscellany of Christian wisdom.'

Expand and justify.

### THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Write an essay on *one* of the following subjects :— 50

(a) The influence of English literature on Indian literary and social ideals.

- (b) The life and literature of Elizabethan England.  
 (c) Revolutions are never made, they happen.  
 (d) The industrial development in India; its possibilities and its limitations.  
 (e) He that observe'h the wind shall not sow; and he that regardeth the clouds shall not reap.  
 (f) True wit is Nature to advantage dressed  
     What oft was thought but ne'er so well expressed.  
 (g) They are slaves who dare not be  
     In the right with two or three.

2. Give the substance of *one* of the following poems :—

25

- (a) Let me not to the marriage of true minds  
     Admit impediments. Love is not love  
     Which alters when it alteration finds,  
     Or bends with the remover to remove :  
     O, no! it is an ever-fixed mark  
     That looks on tempests and is never shaken;  
     It is the star to every wand'ring bark,  
     Whose worth's unknown, although his height be taken.  
     Love's not Time's fool, though rosy lips and cheeks  
     Within his bending sickle's compass come;  
     Love alters not with his brief hours and weeks,  
     But bears out even to the edge of doom.  
     If this be error and upon me provéd,  
     I never writ, and no man ever lovéd.
- (b) Eternal spirit of the Chainless Mind!  
     Brightest in dungeons, Liberty! thou art :  
     For there thy habitation is the heart—  
     The heart which love of thee alone can bind;  
     And when thy sons to fetters are consign'd—  
     To fetters, and the damp vault's dayless gloom—  
     Their country conquers with their martyrdom,  
     And Freedom's fame finds wings on every wind.  
     Chillon! thy prison is a holy place,  
     And thy sad floor an altar—for 'twas trod,  
     Until his very steps have left a trace  
     Worn, as if thy cold pavement were a sod,  
     By Bonnivard! May none these marks efface!  
     For they appeal from tyranny to God.

3. Give in your own words the substance of *one* of the following passages :—

25

- (a) Such was the glorious end of these men; they were worthy of Athens, and the living need not desire to have a more heroic spirit although they may pray for a less fatal issue. The value of such a spirit is not to be expressed in words. Any one can discourse to you for ever about the advantages of a brave defence, which you know already. But instead of listening to him I would have you day by day fix your eyes upon the greatness of Athens, until you become filled with the love of her; and when you are impressed by the spectacle of her glory, reflect that this empire has been acquired by men who knew their duty and had the courage to do it, who in the hour of conflict had the fear of dishonour always present in them. The sacrifice which they collectively made was individually repaid to them: for they received again each one for himself a praise which grows not old, and the noblest of all sepulchres—I speak not of that in which the remains are laid but of that in which their glory survives, and is proclaimed

always and on every fitting occasion both in word and deed. For the whole earth is the sepulchre of famous men; not only are they commemorated by columns and inscriptions in their own country, but in foreign lands there dwells also an unwritten memorial of them, graven not on stone but in the hearts of men.

(b) 'Of making books there is no end,' complained the Preacher; and did not perceive how highly he was praising letters as an occupation. There is no end, indeed, to making books or experiments, or to travel, or to gathering wealth. Problem gives rise to problem. We may study for ever and we are never as learned as we would. We have never made a statue worthy of our dreams. And where we have discovered a continent, or crossed a chain of mountains, it is only to find another ocean or another plain upon the farther side. There is only one wish realisable on the earth; only one thing that can be perfectly attained: Death. And from a variety of circumstances we have no one to tell us whether it be worth attaining. A strange picture we make on our way to our Chimaeras, ceaselessly marching, grudging ourselves the time for rest; indefatigable, adventurous pioneers. It is true that we shall never reach the goal; it is more than probable that there is no such place and if we lived for centuries and were endowed with the powers of a god, we should find ourselves not much nearer what we wanted at the end. O toiling hands of mortals! O unwearied feet, travelling ye know not whither. Soon, soon, it seems to you, you must come forth on some conspicuous hill-top, and but a little way further, against the setting sun, descry the spires of El Dorado. Little do ye know your own blessedness; for to travel hopefully is a better thing than to arrive, and the true success is to labour.

#### FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer Questions 1 and 11, and FOUR others.*

*The figures in the margin indicate full marks.*

1. Explain, with reference to the context, *three* of the following passages, adding notes where necessary:— 15
  - (a) I had rather have one scratch my head i' th' sun  
When the alarm were struck, than idly sit  
To hear my nothings monster'd.
  - (b) The broad circumference  
Hung on his shoulders like the moon, whose orb  
Through optic glass the Tuscan artist views  
At evening, from the top of Fesolè,  
Or in Valdarno, to descry new lands,  
Rivers, or mountains, in her spotty globe.
  - (c) So Romulus, 'tis sung, by Tyber's brook,  
Presage of sway from twice six vultures took.  
The admiring throng loud acclamations make,  
And omens of his future empire take.
  - (d) The mighty master smil'd to see  
That love was in the next degree;  
'Twas but a kindred sound to move,  
For pity melts the mind to love

- (e) Soon as she spreads her hand, the aerial guard  
Descend, and sit on each important card :  
First Ariel perch'd upon a Matadore,  
Then each according to the rank they bore;  
For sylphs, yet mindful of their ancient race  
Are, as when women, wondrous fond of place.
2. *Either*, Discuss, with special reference to *Coriolanus*, the statement that Shakespeare 'was of his age; but he was also of the ages.' 15
- Or, '*Coriolanus* is a tragedy of the more extreme Shakespearean type in which is represented a conflict between an individual, or a group of individuals, and certain forces which environ, antagonize, and overwhelm.' Discuss this statement, and compare *Coriolanus* with any other tragedy of Shakespeare.
3. *Either*, Write notes on (a) the picture of Roman womanhood in *Coriolanus*, and (b) the character of Aufidius. 15
- Or, What do you consider to be the chief difficulties which a dramatist meets with in writing a historical play? Show how far Shakespeare overcame them in *Coriolanus*. In what sense can this play be called original?
4. *Either*, Sketch the character of Satan, and summarize his speeches in *Paradise Lost*, Book I. 15
- Or, Write a short essay on *Paradise Lost*, Book I, showing, by reference or quotation, Milton's feeling for beauty, stateliness of manner and imagery, and his talent for melodious and majestic diction.
5. Discuss the statement that '*Paradise Lost* is the product of two movements—Puritanism and the Renaissance.' 15
6. Compare the blank verse of Shakespeare with that of Milton. 15
7. Discuss the statement that the *Rape of the Lock* is a 'page torn from the petty, pleasure-seeking life of a fashionable beauty.' In what sense can this poem be called perfect? 15
8. Give an account of the poetical achievements of Dryden, and estimate his position as a satirist in verse. 15
9. For what reasons are we justified in regarding Burns as a Romantic poet? What are the chief characteristics of his poetry? 15
10. *Either*, 'Poetry should please by a fine excess.' How far does this remark of Keats apply to his own poetry? 15
- Or, 'Had his marvellous genius fully matured, it is impossible to surmise what Keats might have done; but concerning the poetry that he has actually left us, the general verdict is that, while the best of it is of the highest excellence, the most of it is disappointing.' Discuss this statement with reference to those poems of Keats with which you are familiar.
11. Give in your own words the substance of one the following poems :— 25
- (a) O Lyric Love, half-angel and half-bird  
And all a wonder and a wild desire,—  
Boldest of hearts that ever braved the sun,  
Took sanctuary within the holier blue,  
And sang a kindred soul out to his face,—  
Yet human at the red-ripe of the heart—  
When the first summons from the darkling earth  
Reach'd thee amid thy chambers, blanch'd their blue,  
And bared them of the glory—to drop down,  
To toil for man, to suffer or to die,—

This is the same voice : can thy soul know change?  
 Hail then, and hearken from the realms of help!  
 Never may I commence my song, my due  
 To God who best taught song by gift of thee,  
 Except with bent head and beseeching hand—  
 That still, despite the distance and the dark,  
 What was, again may be; some interchange  
 Of grace, some splendour once thy very thought,  
 Some benediction anciently thy smile :  
 —Never conclude, but raising hand and head  
 Thither where eyes, that cannot reach, yet yearn  
 For all hope, all sustainment, all reward,  
 Their utmost up and on,—so blessing back  
 In those thy realms of help, that heaven thy home,  
 Some whiteness which, I judge, thy face makes proud,  
 Some wanness where, I think, thy foot may fall!

- (b) Yes : in the sea of life enisled,  
 With echoing straits between us thrown,  
 Dotting the shoreless watery wild,  
 We mortal millions live alone.  
 The islands feel the enclasping flow,  
 And then their endless bounds they know.  
 But when the moon their hollows lights,  
 And they are swept by balms of spring,  
 And in their glens, on starry nights,  
 The nightingales divinely sing;  
 And lovely notes, from shore to shore,  
 Across the sounds and channels pour;  
 O then a longing like despair  
 Is to their farthest caverns sent!  
 For surely once, they feel, we were  
 Parts of a single continent.  
 Now round us spreads the watery plain—  
 O might our margins meet again!  
 Who order'd that their longing's fire  
 Should be, as soon as kindled, cool'd?  
 Who renders vain their deep desire?—  
 A God, a God their severance rul'd;  
 And bade betwixt their shores to be  
 The unplumb'd salt, estranging sea.

### FIFTH HONOURS PAPER

*Candidates are required to give their answers in their own words  
 as far as practicable.*

*Candidates should answer Questions 1 and 6 and THREE  
 others.*

*The figures in the margin indicate full marks.*

1. Explain, with reference to the context, four of the following passages :— 24

(a) He comes like Gulliver from among his little people, and he cannot fit the stature of his understanding to yours. He cannot

meet you on the square. He wants a point given him, like an indifferent whist-player.

(b) His poetry is the reality, his philosophy—so far, at least, as it may put on the form and habit of 'a scientific system of thought,' and the more that it puts them on—is the illusion. Perhaps we shall one day learn to make this proposition general, and to say: Poetry is the reality, philosophy the illusion.

(c) The notion of the free play of the mind upon all subjects being a pleasure in itself, being an object of desire, being an essential provider of elements without which a nation's spirit, whatever compensations it may have for them, must, in the long run, die of inanition, hardly enters into an Englishman's thoughts.

(d) The Fainalls and the Mirabels, the Dorimants and the Lady Touchwoods, in their own sphere, do not offend my moral sense; in fact, they do not appeal to it at all. They seem engaged in their proper element. They break through no laws or conscientious restraints. They know of none.

(e) If culture, then, is a study of perfection, and of harmonious perfection, . . . it is clear that culture, instead of being the frivolous and useless thing which Mr. Bright, and Mr. Frederick Harrison, and many other Liberals are apt to call it, has a very important function to fulfil for mankind.

(f) I am afraid the poet wants his usual decorum in this place. Was he thinking of the old Roman luxury, or of a gaudy day at Cambridge? This was a temptation fitter for a Heliogabalus. The whole banquet is too civic and culinary, and the accompaniments altogether a profanation of that deep, abstracted, holy scene.

2. *Either*, 'Lamb's essays have the incoherence of dreams.' 17  
Discuss and illustrate.

*Or*, What do you understand by an 'Essay'? To what extent 17  
do Lamb and Arnold fulfil your ideals of an essayist?

3. 'That unique combination of bookishness and natural fancy, which makes the "Eliasic" quality, is obviously as well suited to the letter as the essay' (SAINTSBURY). Amplify. 17

4. *Either*, Consider the poetic theories propounded in Arnold's 17  
essays on Wordsworth and Keats, discussing their critical value and consistency.

*Or*, Discuss the leading ideas in Arnold's essay on *Sweetness* 17  
*and Light*, indicating his abilities as a preacher.

5. Compare Arnold and Lamb as masters of prose style. 17

6. Give the substance of the following passage:— 26

Custom has a two-fold operation; the one to deaden the frequency and force of repeated impressions, the other to endear the familiar object to the affections. Commonly, where the mind is vigorous, and the power of sensation very perfect, it has rather the last operation than the first; with meaner minds, the first takes place in the higher degree, so that they are commonly characterized by a desire of excitement, and the want of the loving, fixed, theoretic power. But both take place in some degree with all men; so that as life advances impressions of all kinds become less rapturous, owing to their repetition. It is, however, beneficently ordained that repulsiveness shall be diminished by custom in a far greater degree than the sensation of beauty; so that the anatomist in a little time loses all sense of horror in the torn flesh and carious bone, while the sculptor ceases not to feel, to the close of his life, the deliciousness of every line of the outward frame. So then, as in that with which we are made familiar,



the repulsiveness is constantly diminishing, and such claims as it may be able to put forth on the affections are daily becoming stronger, while in what is submitted to us of new or strange, that which may be repulsive is felt in its full force while no hold is as yet laid on the affections, there is a very strong preference induced in most minds for that to which they are accustomed over that they know not, and this is strongest in those who are least open to sensations of positive beauty. But however far this operation may be carried, its utmost effect is but the deadening and approximating of the sensations of beauty and ugliness.

### SIXTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks*

#### FIRST HALF

*Answer Question 1 and two others.*

1. Show your acquaintance with any three of the following works :—(a) *Widsith*, (b) *Gawain and the Green Knight*, (c) *Dr. Faustus*, (d) *The Dunciad*, (e) *She Stoops to Conquer*, (f) *The Prelude*, (g) *Adam Bede*, (h) *Sartor Resartus*. 18
2. Write brief notes on two of the following :— 16
  - (a) Middle English Alliterative Poetry.
  - (b) The Odes of Gray.
  - (c) English Pastoral Poetry.
3. Either, Show how far Christianity affected the spirit and themes of Old English poetry. 16  
Or, Write a short essay on Middle English romances.
4. Either, Trace the development of English prose fiction from Mandeville to Richardson. 16  
Or, In what ways does the Drama of the Restoration differ from that of the age of Elizabeth? Who are the chief writers of Restoration Comedy and Tragedy, and which are the most noteworthy plays?
5. Either, Indicate the germs of Romanticism in eighteenth-century poetry, with special reference to the poetry of Thomson, Gray, Cowper, and Burns. 16  
Or, Discuss : 'The development of periodical literature is the most distinctive characteristic of the nineteenth century.'

#### SECOND HALF

*Answer Question 6 and two others.*

6. Write philological notes on any six of the following words and phrases :—*gossip*, *the age I live in*, *its*, *in spite of John's saying so*, *helpmeet*, *a house of his own*, *Yankee*, *England's wrongs*, *is being built*, *children*. 18
7. Estimate the nature and strength of the foreign element in Old English. 16

8. Explain and illustrate *two* of the following :—(a) back-formation, (b) hybridity, (c) the phrasal genitive. 16
9. Indicate the chief characteristics of English. How does English compare with other modern European languages? 16
10. How has English come to borrow words from languages other than Latin, Greek, Scandinavian, and French? Mention *two* words borrowed from each of the following languages :—Portuguese, Spanish, German, Russian, Hebrew. 16

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FIRST PASS PAPER

*Chairman*—**PROF. JNANRANJAN BANERJEE, M.A., B.L.**

*Examiners*—**MR. PRIYANATH CHATTERJEE, M.A.**  
 „ **BRAJASUNDAR RAY, M.A.**  
 „ **SURESCHANDRA RAY, M.A.**  
 „ **AMULYACHANDRA AIKAT, M.A.**  
 „ **NALINIMOHAN CHATTERJEE, M.A.**  
 „ **KUMUDBANDHU RAY, M.A.**  
 „ **ABINASCHANDRA BOSE, M.A.**  
**MRS. RAJKUMARI DAS, M.A.**  
**MR. ASUTOSH CHATTERJEE, M.A.**

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, 'The character who is dramatic plucks for himself the fruit of his own deeds.' Discuss. 16  
*Or*, Compare Caliban with (a) Ariel, and (b) the witches in *Macbeth*.
2. *Either*, Write a brief essay on the soliloquies in *Macbeth*. 16  
*Or*, Show that *Macbeth* is not equal to the struggle with fate and conscience.
3. *Either*, '*The Tempest* is Shakespeare's most beautiful play, the most beautiful play in the world.' Discuss. 16  
*Or*, Illustrate that Prospero is a man with a giant's power which he uses like a god.
4. *Either*, Illustrate by reference to their poems the characteristics of the poetry of *either* Emily Brontë *or* Swinburne. 16  
*Or*, Show how the poetry of Tennyson differs from that of Browning.
5. Elucidate the central idea in any *four* of the following poems :— 16  
*A Greeting, Meeting at Night, Lucifer in Starlight, Mimnermus in Church, Lost Days, Summer Evening.*
6. Explain with reference to the context any *four* of the following passages :— 20

- (a) He loves us not;  
 He wants the natural touch : for the poor wren,  
 The most diminutive of birds, will fight,  
 Her young ones in her nest, against the owl

All is the fear and nothing is the love,  
As little is the wisdom, where the flight  
So runs against all reason.

- (b) He shall spurn fate, scorn death, and bear  
His hopes 'bove wisdom, grace and fear :  
And you all know security  
Is mortal's chiefest enemy.
- (c) Whether thou be'st he or no,  
Or some enchanted trifle to abuse me,  
As late I have been, I not know : thy pulse  
Beats as of flesh and blood ; and, since I saw thee,  
The affliction of my mind amends, with which,  
I fear a madness held me.
- (d) Fly hence, our contact fear !  
Still fly, plunge deeper in the bowering wood !  
Averse, as Dido did with gesture stern  
From her false friend's approach in Hades turn,  
Wave us away, and keep thy solitude.
- (e) Calm on the seas, and silver sleep,  
And waves that sway themselves in rest,  
And dead calm in that noble breast  
Which heaves but with the heaving deep.

## SECOND PASS PAPER

Examiners—	{	MR. RAMPADA MAJUMDAR, M.A.
		DR. SURENDRACHANDRA GUPTA, M.A., PH.D.
		(Lond.).
		MR. SUHASCHANDRA RAY, M.A.
		, GOPALCHANDRA MAITRA, M.A.
		„ JYOTISCHANDRA MITRA, M.A.
		„ CHANDICHARAN MITRA, M.A.
		„ MANJUGOPAL BHATTACHARYYA, M.A.
		„ GIRIJASANKAR BHATTACHARYYA, M.A.
		„ NARENDRANATH CHATTERJEE, M.A.

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

1. Answer any one of the following :—

(a) 'Burke's pamphlets and speeches have lost nothing of their attraction by time.'

To what extent is this true of his *Letter to the Sheriffs of Bristol*, and why?

(b) What do you know of the 'double legislature' holding authority over the American colonies? When and why did they clash with each other? Show how Rockingham's plan fully met the situation by restoring the 'ancient state of unsuspecting confidence in the mother country.'

(c) How does Burke show that the existence in England of a party favourable to America was desirable and that the views of such a party, even when expressed freely, were not calculated to foster the spirit of rebellion in the colonies?

2. Explain, with reference to the context, any *two* of the following :— 16

(a) Nobody has such a fanatical zeal for the criminal justice of Henry the Eighth, that he will contend for executions which must be retaliated tenfold on his own friends; or who has conceived so strange an idea of English dignity, as to think the defeats in America compensated by the triumphs at Tyburn.

(b) General rebellions and revolts of a whole people never were encouraged, now or at any time. They are always provoked.

(c) Instead of being a control on the crown on its own behalf, it communicated a sort of strength to the royal authority.

3. Answer any *one* of the following :— 16

(a) Amplify the following statement :—

'Literature is of a personal character; it consists in the enunciations and teachings of those who have a right to speak as representatives of their kind, and in whose words their brethren find an interpretation of their own sentiments, a record of their own experience, and a suggestion for their own judgments.'

(b) Discuss the following as an adequate criticism of R. L. Stevenson as revealed in his essay *A Penny Plain and Twopence Coloured* :—

'He was not a great writer—in the sense in which Shakespeare is great. He belongs to the order of men who produce little things and shape them lovingly and exquisitely.'

(c) What inferences about Shakespeare the man does Bagehot draw in his essay?

4. Explain, with reference to the context, any *two* of the following :— 16

(a) The time seems coming when he who writes only how this ministerial conjurer out-conjured that other, and then guided, or at least held, something which he called the rudder of Government, but which was rather the spigot of Taxation, wherewith, in place of steering, he could tap, will pass for a more or less instructive Gazetteer, but will no longer be called a Historian.

(b) How is it that these English friends can so brightly paint that particular order of humanity which we call 'gentlemen and ladies,' but neither heroes, nor saints, nor angels?

(c) The translators of the Bible talk of *pence* and not *denarii*, and the admirers of Voltaire do not celebrate him under the name of Arouet.

5. Answer any *one* of the following :— 20

(a) Write a short note on the character of Jabez Wilson as revealed in Conan Doyle's story. What is your explanation of the insignificant part played in it by Dr. Watson? Illustrate the following saying of Sherlock Holmes as a commentary on the problem of *The Redheaded League* :—'As a rule, the more bizarre a thing is, the less mysterious it proves to be.'

(b) Discuss the title of Stacy Aumonier's story, *The Great Unimpressable*. What do you consider to be its climax? Is the reader gradually prepared for it? If so, point out how this is done. Would its omission add to or detract from the value of the story? Give reasons for your answer.

(c) Justify the remark that in *The Burglars* Mr. Kenneth Grahame 'has not only caught but has also expressed the very spirit of boyhood.' Compare this story with Mr. Pett Ridge's *First Impressions* as pictures of boyhood, stating which of the two stories you prefer, and why.

6. *Either*, 'The Acts of the Apostles reveals to us the process by which an obscure Jewish sect expanded into a world-wide Church.' 16

Prove the above by reference to your text.

*Or*, What do you regard as the principal ideas inculcated by St. Paul in the extracts from his *Epistle to the Romans* which appear in your text?

### THIRD PASS PAPER

Examiners—	{	MR. RAMAPRASAD MOOKERJEE, M.A., B.L.
		REV. J. N. RAWSON, B.Sc., B.D.
		DR. ABDULLA-AL-MAMUN SUHRAWARDY, PH.D.
		REV. FR. A. CAMERON, M.A., B.D.
		MR. JYOTISCHANDRA BANERJEE, M.A.
		„ MOHINIMOHAN BHATTACHARYA, M.A.
		„ NARENDRANATH CHAKRABARTI, M.A.
		„ NRIPENDRACHANDRA BANERJEE, M.A.
		„ SYAMACHARAN MUKHERJI, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Give the substance of *one* of the following passages :—

(a) There is a strong feeling in favour of cowardly and prudential proverbs. The sentiments of a man while he is full of ardour and hope are to be received, it is supposed, with some qualification. But when the same person has ignominiously failed and begins to eat up his words, he should be listened to like an oracle. Most of our pocket wisdom is conceived for the use of mediocre people, to discourage them from ambitious attempts, and geneally console them in their mediocrity. And since mediocre people constitute the bulk of humanity, this is no doubt very properly so. But it does not follow that the one sort of proposition is any less true than the other, or that Icarus is to be more praised than Mr. Samuel Budgett, the successful merchant. The one is dead, to be sure, while the other is still in his counting-house counting out his money; and doubtless this is a consideration. But we have, on the other hand, some bold and magnanimous sayings common to high races and natures, which set forth the advantage of the losing side, and proclaim it better to be a dead lion than a living dog. It is difficult to fancy how the mediocrities reconcile such sayings with their proverbs.

(b) Gentility is only a more select and artificial kind of vulgarity. It cannot exist but by a sort of borrowed distinction. It plumes itself up and revels in the homely pretensions of the mass of mankind. It judges of the worth of everything by name, fashion, and opinion; and hence, from the curious absence of real qualities or sincere satis-

faction in itself builds its supercilious and fantastic conceit on the wretchedness and wants of others. Violent antipathies are always suspicious, and betray a secret affinity. The difference between the 'great vulgar and the small' is mostly in outward circumstances. The coxcomb criticizes the dress of the clown, as the pedant cavils at the bad grammar of the illiterate, or the prude is shocked at the backslidings of her frail acquaintance. Those who have the fewest resources in themselves naturally seek the food of their self-love elsewhere. The most ignorant people find most to laugh at in strangers: scandal and satire prevail most in country places; and a propensity to ridicule even the slightest or most palpable deviation from what we happen to approve, ceases with the progress of common sense and decency.

2. Give the substance of one of the following poems :—

25

(a)

*Man.*

He walks the world with mountains in his breast,  
And holds a hiltless wind in vassalage.  
Transtellar spaces are his fields of quest,  
Eternity his spirit's ambassage.  
The uncare'd acre of the firmaments  
Under his hungry harrow, yields increase.  
While from the threshold of dim continents  
They beckon him, who bear the stars in lease.  
And yet is he a thane of foreigners,  
On sapphire throned, but in an unkinged house,  
Arras'd with honours, brodered in gold sheen—  
A palace in a town of sepulchres.  
Voices he hears, but knows not what they mean,  
His own to him the most mysterious.

(b)

*The Earth-Child.*

Out of the veins of the world comes the blood of me;  
The heart that beats in my side is the heart of the sea;  
The hills have known me of old, and they do not forget;  
Long ago I was friends with the wind; I am friends with it yet.  
The hills are grey, they are strange; they breed desire  
Of a tune that the feet may march to and not tire;  
For always up in the distance the thin roads wind,  
And passing out of sight, they pass not out of mind.  
I am glad when morning and evening alter the skies;  
There speaks no voice of the stars but my voice replies;  
When wave on wave all night cries out in its need,  
I listen, I understand; my heart takes heed.  
Out of the red-brown earth, out of the grey-brown streams,  
Came this perilous body, cage of perilous dreams;  
To the ends of all waters and lands they are tossed, they are whirled,  
For my dreams are one with my body—yea, one with the world.

3. Write an essay on one of the following subjects :—

50

- (a) 'A little learning is a dang'rous thing;  
Drink deep, or taste not the Pierian spring.'
- (b) The spirit of adventure.
- (c) Whoso loseth his life shall save it.
- (d) Advertising—its use and abuse.
- (e) The ideal Indian University.

## BENGALI

*Paper-Setters*— { PROF. DINESCHANDRA SEN, RAI BAHADUR,  
B.A., D.LITT.  
,, SUNTI KUMAR CHATTERJI, M.A., D.LIT.

*Examiners*— { *Head Examiner*—PROF. DINESCHANDRA SEN,  
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" BARINDRAKUMAR GHOSH.  
RAI SAHIB JAGADANANDA RAY.  
MR. SATISCHANDRA MITRA, B.A., B.T.  
" GOBINDANATH GUHA, M.A.  
" PURNACHANDRA DE, B.A.  
,, BASANTARANJAN RAY.  
,, GURUBANDHU BHATTACHARYYA, B.A., B.T.  
,, NIKHILNATH RAY, B.L.  
,, MANMATHAMOHAN BASU, M.A.  
MAULVI ABDUL KARIM.  
MR. KALIDAS RAY, B.A.  
,, DINABANDHU MAJUMDAR, M.A.  
DR. SITANATH PRADHAN, M.Sc., Ph.D.

*All answers to be in Bengali, either in the Standard Literary Style (সামুভাষা) or in the Standard Colloquial (চলিত ভাষা), avoiding mixture of forms.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

QUESTIONS ON SET BOOKS: 40 marks.

1. Give a brief critical sketch of the contents of the *Meghanāda-badha Kāvya* Canto II (or Canto III), mentioning the points in which Māikel Madhusūdan Datta was influenced by other writers, Indian or European, for both incident and character. 10
2. Give a short estimate of either the character and personality, or the literary achievement, of Māikel Madhusūdan Datta. 10
3. Either, Write a brief critical appreciation of the *Krishnakānter Uil* in both its plot-construction and character-painting. 10  
Or, Sketch the character of Gobindalāl.
4. Either, Expand, after Rabināranath, the thought contained in two of the following passages :— 10

(a) পৃথিবীর সভ্য সমাজের মধ্যে ভারতগর্ষ নানাকে এক করিবার ভ্রম আদর্শ-রূপে বিবাজ করিতেছে।

(b) গেটের এই লোকটী আনন্দের অত্মাক্তি নহে, ইহা রসজ্ঞের বিচার।

(c) “একবার তোরা যা বলিগা ডাক।”

(d) আমার সমস্ত আকাশ ঝর ঝর ক'রে ব'লছে, "কৈসে গোয়াঁয়াবি হরি বিনে দিন রাতিয়া।"

Or, Write a summary of Rabindranath's reminiscences of two of the following personalities :—(a) Rajendralala Mitra; (b) Father Da Ponaranda; (c) Bankim Chandra Chatterji; (d) Rabindranath's Father; (e) His Latin teacher in England.

### ESSAY, TRANSLATION AND COMPOSITION : 60 marks.

5. Write an essay in Bengali on one of the following themes :—

20

(a) Village Reconstruction : its necessity for national well-being—problems of village life in your own district—natural advantages and disadvantages—the economic situation affecting the various social strata—the religious, cultural, and social outlook—what the young men should do.

(b) A critical appreciation of some book that has moved you deeply : nature and contents and character of the book—its excellences, and defects if any—in what way it has influenced you—how it can influence others, and society at large.

(c) Culture : your conception of culture—influence of the home and of education, and of the social, religious, and political environments on culture—the bearing of culture on one's personal character as well as social and public life.

(d) The Period of Indian History which has the greatest appeal for you (e.g., the Vedic or the Maurya, the Gupta or the Mogul) : great men of the period—the cultural life of the period in philosophy and literature, art and science—social and economic advance—importance of the period in Indian history and its place in world history.

6. Either, Summarize the following passage, bringing out the main idea :—

15

পাশ্চাত্য সভ্যতার সংঘর্ষে আর যাগাই হউক, আমাদের পুরাতন বিচিত্র উৎসব-কলা যে ক্রমশঃ বিলুপ্ত হইতে বসিয়াছে সে বিষয়ে আর কোন সন্দেহ নাই। দোল দুর্গোৎসবই কি, বার ব্রত অনুষ্ঠানাদিই কি, আর জাতকর্ষ অন্নপ্রাণন বিবাহাদি সংস্কারগুলিই বা কি, অন্ন দিন মধ্যে আমাদের সকল ক্রিয়াকর্মেই যেন কি একটি পরিবর্তন সূত্র হইয়াছে—প্রাচীনকালে ইহার মধ্যে যে শুভ আনন্দটুকু ছিল তাহা বৃষ্টি আর ধাকে না, ইহার ব্যাপক সার্বজনীন ভাব সন্নিবিষ্ট হইয়া গিয়া ক্রমশঃ ইহা ব্যক্তিবিশেষের সমারোহময়ী তামসিকতা-মাত্রে আসিয়া না পরিণত হয়। কারণ, আমাদের দেশে, সমাজ-বন্ধন-গুণেই হউক বা লোকের প্রকৃতি-গুণেই হউক, উৎসবমাত্রেই চতুর্পার্শ্বের সর্বসাধারণের যেন একটি চিরন্তন অধিকার ছিল; আমার গৃহের পূজা-পার্বণে, আমার পারিবারিক সকল শুভকর্মে কেবলমাত্র আমি এবং আমার গৃহিণীর নিকট-সম্পর্কীয়গণ নহে, কিন্তু নিকটস্থ সমস্ত গ্রামের, চতুর্পার্শ্বস্থ সমস্ত পল্লীর অন্তরে উৎসব ঘনীভূত হইয়া আসিত, এবং সকলেরই মনে হইত যেন তাহার নিজের বাড়ীর কাজ। এক্ষণে নবায়ন সভ্যতা ব্যক্তিগত স্বাতন্ত্র্যরক্ষাচ্ছলে আত্মপরের মধ্যে ব্যবধান ক্রমশঃই দূরতীক্রমণীয় করিয়া তুলিতেছে—আমরা সকল



(a) ১ :

অধিকার আইনের পাকা মাপকাঠির সাহায্যে নূতন করিয়া বুঝিতেছি ;  
সুতরাং হৃদয়ের কাঁচা সরস সম্বন্ধ অক্ষুণ্ণ রাখা অনেক স্থলেই অত্যন্ত কঠিন  
হইয়া উঠিতেছে ।

Or, Amplify the thought contained in one of the following passages :—

- (a) চন্দ্র কহে, বিষে খাণো দিওঁছি ছড়ায়ে,  
কলঙ্ক যা আছে তাহা আছে মোর গায়ে ।
- (b) কেরোসিন-শিখা বলে মাটির প্রদীপে,—  
“ভাই ব’লে ডাকো যদি, দেবো গলা টিপে” ।  
হেন কালে গগনেতে উঠিলেন চাঁদা,  
কেরোসিন বলি’ উঠে, “এসো মোর দাদা !”

7. Translate into Bengali one of the following passages :—

15

(a) Educate, or govern, they are one and the same word. Education does not mean teaching people to know what they do not know. It means teaching them to behave as they do not behave. And the true ‘compulsory education’ which the people now ask of you is not catechism, but drill. It is not teaching the youth of the country the shapes of letters and the tricks of numbers; and then leaving them to turn their arithmetic to roguery, and their literature to lust. It is, on the contrary, training them into the perfect exercises and kingly continence of their bodies and souls. It is a painful, continual, and difficult work; to be done by kindness, by watching, by warning, by precept, and by praise, and above all, by example. Compulsory! Yes, by all means! ‘Go ye out into the high-ways and hedges, and compel them to come in.’ Compulsory! Yes, and gratis also.

(b) This city of Calcutta, which offered its shelter to thousands upon thousands of men, had become like a steel trap. He could see no way out. The whole body of people was conspiring to surround and hold him captive—this most insignificant of men, whom no one knew. Nobody had any special grudge against him, yet everybody was his enemy. The crowd passed by, brushing against him; clerks from different offices ate their lunch on the road-side out of plates made of leaves; a tired wayfarer on the *maidan* was lying under the shade of a tree, with one hand beneath his head, and one leg crossed over the other; up-country women, crowded into hackney carriages, were on their way to the temple; a *chuprassie* came up with a letter and asked him to read the address on the envelope,—so the afternoon went by, till one by one the offices began to close. Carriages started off in all directions, carrying people back to their homes.

8. Rewrite the following after correcting all errors in spelling, grammar and idiom :—

10

বহু শরীরি উপবেশন করিয়া ২ একাকি অধ্যাপনা করার দরুন  
তাহার প্রতি রোজই শির ধরিত । অত্যাধিক পরিশ্রমের অবস্থ একটা  
ফল হইল । সে পরীক্ষায় উত্তীর্ণ করিল । কিন্তু স্বাস্থ্য এই বেখণ্ড  
বিধগু হইল, তাহা আর সংশোধন হইল না । বহু দীর্ঘ রজনিসমূহ সে  
বিনিদ্রায় কর্তন করিত । তখন স্বীয় শরীরের হ্রাসবৃদ্ধি শরণ করিয়া অজ্ঞ-

সারে বকোহুল পুত হইত। কবিরাজের বটীকাগুলি পান ও নানারূপ  
করল ওষধি ভোজন করিয়া তাহার কোন উপকার সাধিল না। কে  
করিবে তাহার উপকার, নৈসর্গিক নিয়ম লঙ্ঘন করে যে ?

### ALTERNATIVE PAPER

*Paper-Setter*—PROF. S. K. CHATTERJI, M.A., D.LIT.

*Examiner*—DR. MUHAMMAD SHAHIDULLA, M.A., PH.D.

*Candidates are required to give their answers in their own words  
as far as practicable.*

*Write your answers in Bengali (for GROUP II, you may write in  
English): use EITHER the সাধু ভাষা OR the চলিত ভাষা,  
but you must not mix up the two styles  
in the same composition.*

#### GROUP I.

HISTORY OF BENGALI LITERATURE: 45 marks.

*Select any THREE questions from this group.*

1. Write a brief account of the Govinda-candra or Gopi-candra legend and its place in Bengali literature, mentioning the more important works dealing with it.
2. Give a short sketch of Bengali literature prior to 1500 A.D.
3. Discuss the nature and the relative importance of the various early Bengali biographies of Caitanya.
4. Give a short appreciation of Kavikāṅkṣa Mukundarāma Cakravartī as a painter of life and society and of individual character.
5. Write a brief account of the more important *pada* collections, describing their method of arranging the poems.
6. Indicate the place of Māikel Madhusūdan Datta in Bengali literature.
7. Give an account of Dinabandhu Mitra as a dramatic writer.
8. Write notes on five of the following authors or works:—

রামমোহন রায়; ভদ্রার্জুন নাটক; কালীকাবেয়ী; সীতার বনবাস;  
বিহারীলাল চক্রবর্তী; ভূদেব মুখোপাধ্যায়; ব্রহ্মসংহার; বঙ্গদর্শন; লোকরহস্য;  
জীবনসঙ্ক্কা; রজনীকান্ত সেন; ত্রীকান্ত; আলো ও ছায়া; হতোম পোঁচার  
নক্সা।

#### GROUP II.

HISTORY OF THE BENGALI LANGUAGE: 25 marks.

*Answer any TWO questions from this group.*

9. Indicate the stages in the development of Bengali as a Modern Indo-Aryan language from Old Indo-Aryan (Sanskrit), adducing suitable examples in illustration of your answer.

10. Explain the relationship between the *Sādhū-bhāṣā* and the *Calit-bhāṣā* (the Standard Literary and the Standard Colloquial), and write a brief note on the dialects of Bengali. What is the pronunciation and significance of the colloquial form ক'বুছি in East Bengali and in West Bengali?

11. Write a note on the pronunciation of অ, আ, ঈ, ঐ, ও, ঔ, ণ and অন্তঃস্থ ব in Bengali.

12. Write notes on five of the following :—‘প্রাকৃত’; কুটিল লিপি; the source of the genitive affix র,এর; the source of দ্বিগ; পরার; লাচাড়ী; auxiliary or compound verbs; the passive voice in Bengali; the Conquest of Ceylon and Bengal; the Aryan languages of India.

### GROUP III.

#### BENGALI ESSAY: 30 marks.

13. Write an essay in Bengali on one of the following subjects :—

- (a) বাঙ্গালা সামাজিক উপশ্রাস ।
- (b) ভারতের রাষ্ট্রভাষা ও বাঙ্গালা ।
- (c) গঙ্গানদী ।
- (d) বাঙ্গালার গ্রাম ।
- (e) অরণ্য ।
- (f) বাঙ্গালা সাহিত্যে হান্তরস ।
- (g) বাঙ্গালা ভাষায় ফারসী শব্দ ।

### ASSAMESE

*Paper-Setters*—{ MR. BANIKANTA KAKATI, M.A.  
SRIJUT PADMANATH BARUA, B.A.

*Examiner*—MR. AMBIKANATH BORA, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into Assamese the following passage :—

15

The modern revolt against conventional morals is a sign of the quickening of conscience. Changes in the moral codes are generally brought about by a few individuals who throw aside their prejudices and get at the reality which is much bigger and finer than our conventions make us believe. Every moral reformer is an immoral force in the eyes of the conservative who prefers the comfortable sloth of conventional morality to the alarming activity of reflective intelligence.

For morality is nothing else but the current brand of social custom, and any one who insists on doing differently is immoral, though his immorality acquires ethical value in the next generation

and becomes a part of the tradition in another. At any one period, we always have a few who are in advance of the highest life-conception of the time and some behind it, while a large number are about it. The first are the rebels, the second the criminals, and the last the normal individuals. All progress is due to the rebels.

2. Write an essay in Assamese on *one* of the following subjects :— 20

- (a) 'An unexamined life is not worth living.'  
(b) Modern Assamese literature.

3. Account for the case-endings in the words underlined in the following :— 10

- (a) চিন্তে সৈতে ।  
(b) ঘুৰণীয়া মুখেৰে লৰাটো ।  
(c) গোপালৰ খোৱা হল ।  
(d) মই গোপালে লিখা চিঠিখন পাইছোঁ ।  
(e) সোমবাৰে আহিব ।

4. Discuss the date of Hem Sarasvatī in the light of the references furnished by your text. 15

5. “পূৰ্ণ অসমীয়া সাহিত্যত মাধৱদেৱ বাৎসল্য বসৰ শ্ৰেষ্ঠ প্ৰকাশক” । 15

Examine this statement with reference to your text.

6. Give an account of the literary activities of Sankar Dev. 10

7. Explain with reference to the context any *three* of the following passages : 15

- (a) “যিটি গান তুমি বিবহী যক্ষই  
পালে গিৰি চিত্ৰকূট ;  
সেই সূৰতে নে কবি কল্পনাত  
ফুটি উঠে মেঘদূত ?”
- (b) “গালি মাজনিশা দীপক সূৰত  
প্ৰেম সঞ্চাৰিণী গান ;  
কুসুম কোমলা সবলা উষাৰ  
মোহিত কৰিলি প্ৰাণ ?”
- (c) “হামাকু চোৰ, বোলসি তোহো চাত্তী,  
আপুনাহ দাঁধ দুখ খাই ।”
- (d) “যো হাব এ তিনি ভুবন অধিকাৰী ।  
গোকুল মাজে গোহি গবছ ডিখাবী ॥”

## HINDI

Paper-Setters— { LALA SITARAM, B.A.  
PANDIT SAKALNARAYAN SARMA.

Examiner—MR. RAMKRISHNA SUKLA, M.A.

Candidates are required to give their answers in their own words  
as far as practicable.

The figures in the margin indicate full marks.

1. सीता लखन समेत प्रभु राजत पर्णकुटीर । 8  
भगति ज्ञान बैराग्य जनु सोहत धरे सरोर ॥

Explain fully in Hindi the appropriateness of the three similes  
for each of the three personages in the above *dohā*.

2. Explain fully in Hindi any two of the following passages : 12.

- (a) चारु चरननख लेखति धरनी ।  
नूपुर सुखर मधुर कवि बरनी ॥  
मनहुँ प्रेमबस विनती करहौं ।  
हमहिँ सौथपद जान परिहरहौं ॥
- (b) और को जानै रस को राति ।  
कहां हौं दीन कहां विभुवनपति मिले पुरातन प्रीति ॥  
चतुरांगन तन निमिष न चितवत इती राज की नीति ।  
मों सों बात कही हिरदय को गये जाहि जुग बीति ॥  
बिनु गोविन्द सुख सुन्दरि कैसे भुस पर की सी भीति ।  
हौं कहा कही सूर के प्रभु के निगम करत जाकी कीर्ति ॥

- (c) कति क देस दह्यो दल के बल,  
दखि न बंगुल चापि कै चाख्यो ।  
रूप गुमान हस्यो गुजरात को,  
सूरति को रस चूसि दो नाख्यो ॥  
पंजन पेलि मलेच्छ सख्यो सब,  
सोई बख्यो जेहि दीनहूँ भाख्यो ।  
सो रंग है मिबरान बली जेहि,  
गौरंग में रंग एक न राख्यो ॥

3. Describe in Hindi the appearance of Sivāji in the court of Aurangzeb according to Bhūshan. How does it differ from the account generally given in ordinary Indian histories? 10

4. Note the principal points of difference in the conjugation of verbs in the *Ayodhyā Kāṇḍ* and the *Sura Padāvalī*. 10

5. Amplify the following :— 15

राम चरित चिन्तामनि चारु ।

सन्त सु मति तिष्ठ सुभग सिंहास ॥

जग मंगल गुन राम राम के ।  
 दानि मुक्ति धन धरम धाम के ॥  
 सदगुरु ज्ञान विराग जोग के ।  
 विबुध वेद भव भीम रोग के ॥  
 जननि जनक सिध राम प्रेम के ।  
 बीज सकल व्रत धरस नेम के ॥

6. Translate into Hindi :—

15

Who so is unmoved by lust, anger, pride, or arrogance, and is without covetousness, excitement, partiality or malice, without fraud, hypocrisy, or heretical delusion; dwell in his heart, Raghurāya. They who are all men's friends, and are friendly to all; to whom pleasure and pain, praise and abuse are alike; who are careful to say what is both true and kind; who, whether sleeping or waking, place themselves under your protection and have no other way of salvation but you; in their heart, Rama, abide. They who look upon another man's wife as their own mother, and another man's wealth as the deadliest poison, who rejoice to see a neighbour's prosperity and are grieved for his misfortunes; and to whom you, O Rama, are dear as their own life: be their heart your auspicious abode.

7. Explain the various significations of the suffix को in Hindi. 5

8. Frame sentences to illustrate the use of the following in Hindi :— 5

(a) हाथ आना । (b) हाथ मलना । (c) मुंह बनाना ।  
 (d) आँख लगना । (e) दाँत पीसना ।

9. Write an essay in Hindi on one of the following subjects :— 20

(a) कत बिधि सजी नारि जग साँझी ।

पराधीन सपनेहु सुख नाहीं ॥

(b) सखी देश सेवा ।

(c) Modern University education.

## MAITHILI

*Paper-Setter and Examiner—MR. GANGANAND SINGH, M.A.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Either, How far is the language of Vidyapati's *Kīrti-lātā* Maithili? Discuss the origin of the play with special reference to this question. 20

Or, Give your views with regard to the *Sāmapati Punarjanma Nāṭaka* of Jivan Jhā.

2. Explain, with reference to the context :— 10

अवन पुदव हिसि बहलि सगरि निसि

गगन मगन मिल चन्दा ।

सुनि गेलि कुसुदिनि तहयो तोहर धनि

सूना सुख अरविन्दा ॥

8. Describe after Manabodha the journey of Krishna to the capital of Kansa. 10

4. Amplify in Maithili the idea contained in the following :— 15

अपन अपन अन्तरात्मिक आदेशानुसार जे लोकनि हिंसाक परित्याग करैत जयताह ओ लोकनि अपन श्रेयोविधानक अतिरिक्त हमरा देशक बड़ लाञ्छनक मार्जन में सहायता देताह ।

5. Translate into Maithili :— 15

Just as the chronicle of last year's events in India began with the statement that the appointment of the Indian Statutory Commission was the most important happening of the year, so the present narrative begins with the statement that the issues with which the Commission are concerned were the centre of political interest during the year now under review. During the period the Commission completed a very important part of its inquiry, namely that part which had to be carried out in India itself. During the course of their tour Sir John Simon and his colleagues visited every province and obtained material which will enable them to study from every point of view the problems on which they have to report.

6. Construct sentences to use the following words in feminine gender :— 5

(a) मनुष्य । (b) जेना । (c) गोचार । (d) चमार । (e) गिदर ।

7. What is an अनुग्रह ? Give illustrations. 5

8. Write in Maithili an essay on any one of the following subjects :— 20

(a) Isolation is death.

(b) Scientific inventions and the modern world.

(c) The glories of mediaeval Mithilā.

## ORIYA

*Paper-Setters*— { MR. ARTABALLABH MAHANTI, M.A.  
,, PRIYARANJAN SEN, M.A.

*Examiner*—PANDIT NILKANTHA DAS.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into Oriya any one of the following passages :— 15

(a) In the second century of the Christian era, the empire of Rome comprehended the fairest part of the earth, and the most civilized portions of mankind. The frontiers of that extensive monarchy were guarded by ancient renown and disciplined valour. The gentle, but powerful, influence of laws and manners had gradually cemented the union of the provinces. Their peaceful inhabitants enjoyed and abused the advantages of wealth and luxury. The image of a free constitution was preserved with decent reverence : the Roman senate appeared to possess the sovereign authority, and developed on the emperors all the executive powers of government.

(b) Desire of fame naturally betrays the ambitious man into such incencies as are harmful to his reputation. He is still afraid lest any of his actions should be thrown away in private, lest his deserts should be concealed from the notice of the world, or receive

any disadvantage from reports which others make of them. This often sets him on empty boasts and ostentations of himself, and betrays him into vain fantastic recitals of his own performances : his discourse generally leans one way, and whatever is the subject of it, tends obliquely either to the detracting from others, or to the extolling of himself.

2. Give a short sketch of Nazir Bahu as depicted by Fakir Mohan, laying stress on the peculiar traits of his character. 16

3. Write a note on *either* ହିତବାଦନୀତି *or* ରାଷ୍ଟ୍ରାଚର୍ଯ୍ୟା. 10

4. Explain any *two* of the following with reference to the context :— 12

(a) ଯେଉଁଠାରେ ପ୍ରେମ, ସେହିଠାରେ ବାଧ୍ୟତା-ସୁରାଂ ପ୍ରେମହିଁ ପବିତ୍ରତାର ପ୍ରବୃତ୍ତି ପଥ । ପ୍ରେମର ଧର୍ମହିଁ ଶ୍ରେଷ୍ଠ ଧର୍ମ ।

(b) ସେଥିରେ ଦୃଢ଼ିମତାର ଗନ୍ଧ ନାହିଁ—କୌଣସି ପ୍ରକାର ଆବରଣ ନାହିଁ । ଯାହା ନୀବନ, ତାହାହିଁ ସାହିତ୍ୟ ।

(c) ବିଚାରାଳୟରେ ବିଶେଷ ଅବସ୍ଥା ଅବଗତ ଥିବା ଉପସ୍ଥିତ ଦର୍ଶକମଣ୍ଡଳୀ ଓ ଅମଳାମାନେ ଚଢ଼ିତ ଓ ନିସ୍ତବ୍ଧ । ରୁମ୍‌ସଂକୁଳ ପାର୍ଥିବ ବିଚାରାଳୟ ସମ୍ମୁଖରେ ଏହା ଗୋଟାଏ ଢିଲି ନୁହେଁ ନୁହେଁ ॥ ...

5. Explain the following :—

(a) ଅମବଦ ଗବଦ ରୂମା ବାଜ୍ୟ ଅଗୋଚର  
ମୁଣର ସ୍ତବ୍ୟ ପ୍ରାଣ ସେ ନୀରବ ସ୍ଵର ।  
କେ ନାଶେ କାହିଁ ସେ ବାଣୀ-ବାଣୀର ଗବଦ  
କେମନ୍ତେ ପୁରିଲା ରୁଷି-ହୃଦ-ବିଷ୍ଣୁପଦ ।

(b) ରଢ଼ିପ୍ରୀତି ସହଚରୀ ଆମା ଅଧିଷ୍ଠିତ  
ଏ ସ୍ଵର୍ଗ ଗୋରଣ  
ସଦା ଅବାରିତ-ଦ୍ଵାର ପ୍ରଭା-ବିରାଷିତ  
ବିମ୍ବ-ବିମୋହନ ।



6. Rewrite the following in simple Oriya :--

10

ପ୍ରତ୍ୟେକ ମନୁଷ୍ୟର କିଛି ନା କିଛି ମୌଳିକତା ଅଛି । ସେ ତାହାର ମାନସିକ ଗତି ଓ ମେଧାବଳରେ ଓ ସ୍ୱାୟତ୍ତ ଉଦ୍ଭାବିକା ଗତି ସାହାଯ୍ୟରେ ଅନେକ ଅଭିନ୍ନ ବିଷୟ ଆବିଷ୍କାର କରେ । ତେଣୁ ତାହାର ପୂର୍ବପୁରୁଷ-ମାନଙ୍କ ପରି ଧର୍ମରାଜ ଓ ଧର୍ମନିଷ୍ଠା ଠିକ୍ ସେହିପରି ରାଜରେ ରନ୍ଧେ ନାହିଁ । କାରଣ ତାହାର ଗବେଷଣା ଗତିଦ୍ୱାରା ସେ ସେହି ରାଜସମୂହର ସଂପ୍ରସାରଣ ଓ ସ୍ୱାୟତ୍ତ ଅନୁରୂପ ସାହାଯ୍ୟରେ ବାସ୍ତବ ଜଗତ ବିଷୟରେ ଅନେକାନେକ ଅରିନବ ତଥ୍ୟ ଆବିଷ୍କାର ପୂର୍ବକ ମନୁଷ୍ୟ ଜୀବନରେ ଦୋର ପରିବର୍ତ୍ତନ ସଂପାଦନ କରେ ।

7. Construct sentences with the following words :—

ରାଜୁଣି, ଟାଉ, ଲୁଟିପୁଟି, ଉଡ଼ାମ, ଗୋସ୍ତାଦି, ଝୁକୁଣା, ଅଡ଼ତ ।

8. Write an essay in Oriya on one of the following subjects :—

20

- The industrial needs of India, especially of Orissa and of your home district.
- Duties of a citizen : his rights and responsibilities.
- The influence of extensive reading of fiction on character.

## NEPALI.

*Paper-Setters*— { PANDIT DHARANIDHAR SARMA, B.A.  
,, BODHBIKRAM ADHIKARI, M.A.

*Examiner*—MR. DHARANIDHAR SARMA, B.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Fully describe in Nepali the parentage of sakuntala and how she came to be brought up in the hermitage of Kanwa. 10

*Or*, Narrate in Nepali the circumstances under which Urbashi, a celestial nymph, came to be united with Pururaba, an earthly king, as his wife.

2. *Either*, State in your own words in Nepali the occasion of the meeting of Dushyanta and sakuntala, their love at first sight and their consequent marriage. 10

*Or*, Describe fully in Nepali the life led by Pururaba and Urbashi in the forest of Gandhamadana with all its vicissitudes.

3. *Either*, Sketch the character of Manabaka, the Brahmin clown at the court of Pururaba. 10

*Or*, Describe fully the hermitage of Kanwa and show how an atmosphere of peace and piety prevailed there.

4. *Either*, Describe in Nepali the capture of Urbashi by the Danavas and her subsequent release by Pururaba with its effect on the king. 10

*Or*, State in Nepali in what form of marriage Dushyanta and Sakuntala were united and what were the other forms of marriage prevailing then in India.

5. Give the idea contained in the following :— 15

कतौ कराउंछन् सधै न पाइ खान एक सुठौ,  
कतौ छडाउछन् उसै अकार्यमा सुती सुती-  
धनी भइ विचारको सहाय लेउ यो चरौ,  
गरीबको हुँदैन वेस अवश्य पायुको भरौ ;  
सहाय देउ द्रव्यको दयालु भैजगत् मझौ,  
दिनू लिनु छ सार यै समस्त द्रव्यको जझौ.

6. Translate the following into Nepali :— 15

He drew a sharp quick breath—the hum of the gay voices around him was more meaningless to his ears than the sound of the sea breaking on the beach below. He glanced at the girl—the fair and innocent creature, who had, in his imagination, risen to a throne of imperial height, from which she could bestow on him death or salvation. How calm she seemed! She was pale, and her eyes were heavy; but she smiled now and then—such a smile! Even so sweetly might the 'kiss-worthy' lips of the Greek Aphrodite part, could that eloquent and matchless marble for once breathe into life. He looked at her with a sort of fear. Her hands held his fate. What if she could not love him? What if he must lose her utterly? This idea overpowered him; his brain whirled, and he suddenly pushed away his untasted glass of wine and rose abruptly from the table, heedless of the surprise his action excited.

7. (a) Give the figurative meanings of any *two* of the following, and use them in sentences of your own :— 5

- (i) कानमा तेल हालनु । (ii) कान समातनु ।  
(iii) कुइना ठोकनु । (iv) मामाको घर देखाउनु ।  
(v) बाबको बिडा देखाउनु ।

(b) Rearrange the following words so as to make a complete sentence :— 5

बीरल जातिको गीरखाली गुरुजनको हुन् कटसहन श्रील सेवा हामी र गहना.

8. Write an essay in Nepali on any *one* of the following subjects :— 20

- (a) There is no shame to be a shoemaker, but it is a shame for a shoemaker to make bad shoes.  
(b) The possible achievements of science in another fifty years.  
(c) Broadcasting as a source of information and amusement.

## TELUGU

Paper-Setters— { PROF. S. RADHAKRISHNAN, M.A., D.LITT.  
MR. B. RAMCHANDRA RAU, M.A.

Examiner—MR. B. RAMCHANDRA RAU, M.A.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. ప్రాచీన తెలుగుభాషకును ప్రస్తుత తెలుగుభాషకు గల తారత 20  
మ్యము లేవియో విశదముగా వ్రాయుడు.

2. వాల్మీకి రామాయణములో లేనటువంటి కొత్త సంగతులు మీ 20  
గ్రంథకర్తయే యేవిషయములయందు పొందు పఱచెనో వ్రాయుడు.

3. ఈ క్రింది పద్యమునకు తాత్పర్యము వ్రాయుడు :— 10

కన్నులు దచ్చియెల్లిడలు గన్నెని వృద్ధనరేంద్రుడాత్తకుం  
గన్నులు బోలెనైన తన గాదిలి పుత్తుడు గాన సంబులో  
నెన్నడు లేనియంతె తడవేటికి జిక్కెనెయంచు నార్తిలో  
గన్నులు లేనియట్లాకడు గానకయెచ్చె సతీసమేతుడై

4. ఈ దిగువనుదాహరించిన పద్యముయొక్క భావము గ్రహించి 10  
(రెండు పేజీలు మించకుండా) వ్యాసము వ్రాయుడు :—

“ ఎదరికే రీతి భావనలెనగుచుండు

వారికా రీతి తగునీధి వఱలుచుండు.”

5. Translate the following passage into idiomatic Telugu :—

20

We witness a seething unrest and ceaseless activity in every field of our life. Tremendous forces have been let loose, much like the waters of a mighty river, and at times it would appear that they are capable of doing nothing but mischief. The bitter quarrels between the Hindus and the Muslims are essentially a part of the National Renaissance, for it shows that the minorities who have been suppressed and oppressed in the past are fully conscious of their rights and are attempting to assert them. Exaggeration in the beginning is but natural, and it is for our own good that each community should attain its equality with the others as soon as possible. Similarly in the political field we are witnessing the tremendous drama of a struggle for national rights, and here again exaggerations and distortions are but a natural part of the game. In religious matters, artistic and educational spheres, long-standing distortions

have been swept away and the past being brought into line with the spirit of the times.

6. Write an essay on the following subject in idiomatic 20  
Telugu :—

*either రాజనీతి, or సాంఘికనీతి.*

### MALAYALAM

*Paper-Setter and Examiner—REV. C. E. ABRAHAM, M.A., S.J.*

*Candidates are required to give their answers in their  
own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. താഴെപ്പറയുന്ന വിഷയങ്ങളിൽ ഏതെങ്കിലും 35  
ഒന്നിനെക്കുറിച്ച് ഒരുപന്ത്യാസം എഴുതുക :—

എ. രാമായണത്തിലെ ആദർശങ്ങൾ.

ബ. പാശ്ചാത്യ പരിഷ്കാരത്തെക്കുറിച്ചുള്ള ഒരു  
ഗുണദോഷനിരൂപണം.

സ. മലബാറിലെ ക്ഷേത്രങ്ങൾ.

ര. മലയാള ഭാഷാ സാഹിത്യത്തിന്റെ അഭിവൃദ്ധി  
മാർഗ്ഗങ്ങൾ.

ദി. പരസ്പര ധനസഹായ സംഘങ്ങൾ.

2. 'മാത്ത്യാഡവമ്മ'യുടെ ഗ്രന്ഥകർത്താവിനെക്കുറിച്ച്  
നിങ്ങൾക്ക് എന്തിനാണ്? അല്ലെങ്കിൽ, തിരുവനന്ത  
പുരം പട്ടണത്തെക്കുറിച്ച് പ്രസ്തുത ഗ്രന്ഥത്തിൽ നിന്ന്  
നിങ്ങൾക്ക് എന്തു ഗ്രഹിക്കാം?

3. മാത്ത്യാഡവമ്മയാൽ നിന്ന് നിങ്ങൾക്ക്  
ഏറെയും അധികം ഇഷ്ടം തോന്നുന്ന ഒരു കഥ.  
പാത്രത്തെ വിവരിക്കുക.

4. 'സുഭദ്ര'യുടെയോ, 'സുന്ദരയ്യ'ന്റെയോ, സാ 7  
മന്ത്രിത്തെ ഉദാഹരിച്ച് വിസ്മരിക്ക. അല്ലെങ്കിൽ,  
മാതൃത്വസംബന്ധമായിലെ യഥാർത്ഥ നായകൻ ആരെന്ന്  
കാരണ സഹിതം സ്ഥാപിക്ക.

5. (a) താഴെക്കാണുന്ന സംഭാഷണം നല്ല മലയാളം 5  
ത്തിലാക്കുക :—

പലനം—“ആ — പിച്ച് — പണ്ണട്ടല്ലോ. പിച്ച്യെ  
കൊണ്ണിപ്പയോടോ?”

ഒഴക്കൻ. “ഏതു പിച്ച്യെടാ മച്ചമ്പി?”

കൊപ്പിളൻ. “നോക്കൂ. തെരിയാതെണ്ണ?”

ഒഴക്കൻ. “എക്കെ അപ്പിച്ച നാണ് എക്കറിഞ്ചൂടെ.”

ഭ്രാന്തൻ. “പയകളെ എല്ലാം ഒണ്ണൊണ്ണാ അരിഞ്ചല്ലാ  
മാവാവി പോട്ടിരിക്കട്ടെ. നമ്മ ആണുക്കളെക്കി  
പൊറക്കുമെണ്ണ?”

(b) ഈ സംഭാഷണത്തിന്റെ സന്ദർഭം എന്തു? 3  
'ഭ്രാന്തൻ' ആരു?

6. ഇല്ലാക്കിനെക്കുറിച്ച് എന്തറിയാം? അല്ലെങ്കിൽ, 12  
റാസ്സലാസിൽ നിന്ന് പഠിക്കാവുന്ന സന്മാർഗ്ഗ പാഠങ്ങൾ  
എന്തെല്ലാമെന്ന് പറക.

7. Translate into Malayalam :—

(a) Adversity rightly used develops and reveals character. 10  
This is found true in the lives of many great men in this world.  
We think of James Watt as a genius at invention. But Watt him-  
self was sickly of body, starving on eight shillings a week, and  
saying, 'Of all things in life there is nothing more foolish than in-  
venting.' Wilberforce 'the attorney general of the unprotected and  
of the friendless,' was for twenty years compelled to use opium to  
keep himself alive. One of the chief rewards of reading biography

is this introduction that it gives to handicapped men, who in the words of Thucydides, 'dared beyond their strength, hazarded against their judgment, and in extremities were of excellent hope.'

(b) He prayeth well, who loveth well  
Both man, and bird, and beast.  
He prayeth best, who loveth best  
All things both great and small;  
For the dear God who loveth us,  
He made and loveth all.

5

8 ക.വിയശസി ദുരാശ ചൂഷ്ട പൊട്ട -

10

ക്കവിത പൊഴിച്ചു മഹാജനത്തിനിണൻ,  
ചെവിതള തടവിച്ചു പാപമാവാ -  
മവിനയനാം മമ കണ്ണുരോഗഹേതു.

മേലെഴുതിയിരിക്കുന്ന ശ്ലോകത്തിന്റെ അർത്ഥം വ്യാഖ്യാനി  
ച്ചെഴുതുക. കവി ബധിരനാകുന്നതിനുള്ള കാരണങ്ങൾ  
എന്തെല്ലാമെന്നാണ് “ബധിരവിലാപ”-ത്തിൽ സങ്ക  
ല്പിച്ചിരിക്കുന്നത്?

—

## GUJARATHI

*Paper-Setter*—PROF. I. J. S. TARAPOREWALA, B.A., PH.D.

*Examiner*—PROF. HARGOBINDA DAS SETH.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

જવાબ ગુજરાતીમાં જ લખવા.

1. નીચેના વિષયો પૈકી એક પર નિબંધ લખો : 20

(ક) સ્વાશ્રયનો છે ઉદ્ધાસ.

(ખ) મનુષ્ય પ્રયત્ન, ઈશ્વર ઇચ્છા.

(ગ) સેવામાં ઈશ્વરના મેવા.

2. લેખક તરીકે સામળ તથા અખા એ બેમાં શ્રેષ્ઠ તમો કોને ગણો ? 15  
સવિસ્તર તથા ઉદાહરણો ટાંડીને લખો.

અથવા

ગુજરાતી સાહિત્યમાં પ્રેમાનંદ નું સ્થાન અદ્વિતીયતા કારણે ગણાય છે તે સમજાવો.

3. લક્ષ્મી દેવી તમારાં પાઠ્ય પુસ્તકમાં કેટલું સ્થાન ભાગવે છે તે લખો 15

4. મુંજના સ્વભાવને તમો ગર્વિષ્ટ ગણો છો કે ટેકીલો ? સવિસ્તર 15  
સમજાવો.

5. નરસિંહ મહેતાની દૃષ્ટિ ભક્તિને મીરાંની ભક્તિ સાથે સરખાવો. 15

6. નીચલા પૈકી એકની ગુજરાતી ભાષામાંનું સમજાવું આપો :

- (ક) કદુ વાણી સુણે જોતું,      મીઠી વાણી સદા કહેજે;  
 પરાઈ મૂર્ખતા કાળે,      સુખે ના ઝેર તું લેજે,  
 અરે પ્રારબ્ધ તો થેલું,      રહે તે દૂર માગે ને  
 ન માગે દોડતું આવે,      ન વિશ્વારે કદી રહેજે,  
 રહી નિર્મોહી શાંતિથી,      રહે એ સુખ મોટું છે;  
 જગત બાજબરીમાં તું,      બધાં છલ બલ જવા દેજે.  
 પ્રભુનાં નામનાં પુણે,      પરોવી કાવ્ય માલા તું;  
 પ્રભુની ખ્યારી ઝીવામાં,      પહેરાવી પ્રીતે દેજે.

(ખ) મદાર્કવાળા પદાર્થ હદ ઉપરાંત પીવાથી મનની શક્તિ એ તેમજ ઘમ્છા શક્તિ નબળી પડે છે. સ્પર્શ શક્તિ બગડે છે, અને માણસ બેદરકાર નવાથી તેના કામમાં બુલથાપ આવે છે. મદાર્કવાળા પદાર્થ અતિશય પીવાથી થતાં આબધાં ભયાનક પરિણામે પીનારાનાં છોકરાં એમાં વિશેષ કરી જોવામાં આવે છે. આવા પીવાના પદાર્થો કંઈ જરૂરના નથી. એ પર પૈસા ઉડાવે તે તે છોકરાંની કેળવણી જેવા ઉપયોગી કામોમાં અર્થે તો તે વધુ ડહાપણ ભરું ગણાય.

7. નીચલાનો ગુજરાતી અનુવાદ કરો :

15

A bad taste of reading mean books is one of the chief causes of leading young minds astray. Sensational literature creates wicked thoughts suggestive of evil actions. I have seen vicious writings in the hands of many young people. Teachers do not care enough to see what their pupils read. They trust them too much. They ought to know that students are not angels but human beings. Boys are boys after all, and as such apt to err and to go wrong.



## TAMIL

Paper-Setters— { RAO BAHADUR L. K. ANANTHAKRISHNA  
IYER, B.A., L.T.  
MM. VEDANTAVISARAD ANANTAKRISHNA  
SASTRI.

Examiner—MM. VEDANTAVISARAD ANANTAKRISHNA SASTRI

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. (a) அடியிற் கண்ட சொற்களின் பொருளையும் கருத்தையும் 20 குறிக்குக.

(i) குற்றங்கடிகதல், (ii) சித்தினஞ்சோராமை, (iii) வலியறிதல், (iv) கல்லாமை.

(b) கேள்விக்குப்பின் அறிவுடைமையையும் காமலறிதலுக்குப்பின் இடனறிதலையும் வைக்கக்காரணம் யாது?

2. பதவுரை தெளிவுரைகளுடன் அடியிற் கண்ட குறள்களின் 20 கருத்தை விளக்குக.

(a) கடலோடா கால்வ னெடுத்தோர் கடலோடு  
நாவாயு மோடா நிலத்து.

(b) நல்லினத்தி னூங்குந் துணையிலலை தீயினத்தி  
னல்லந் படுப்ப தூஉமில்.

3. அயோத்திகாண்டம் முதலாவதுபடலத்தின் கருத்தை விளக்கி 20 கம்பரின் மேன்மையை விவரிக்குக.

4. அடியிற் கண்ட குறள்களினொன்பன் கருத்தை விரைந்து 20 அடைத்தழுவி நீண்ட ஓர் வியாசமெழுதுக.

(a) பிறன்பழி கூறுவான் நன்பழி யுள்ளுந்  
திறன்றெரிந்து கூறப் படும்.

(b) மறவற்க மாசற்றார் கேண்மை துறவற்க  
துன்பத்துட் பெப்பாயார் கட்டி.

5. Translate into Tamil the following passage :—

20

We have seen before, how Tughril Khan's attempt to set up an independent kingdom in Bengal met with a miserable failure. Ghiyasn-d-din Balban, who suppressed the revolt with terrible cruelty,

appointed his second son, Bughra Khan, as the Governor of Bengal. When Bughra Khan's son Kaikobad ascended the throne of Delhi, Bengal became virtually independent. At first the Muslim suzerainty was confined to North Bengal but the two sons of Bughra Khan, who succeeded him, conquered respectively southern and eastern Bengal, driving away the descendants and successors of Lakshmana Sena from the latter place.

## BURMESE

*Paper-Setters*— } PROF. PE MAUNG TIN, M.A.  
 } MAUNG BA, B.A.

*Examiner*—PROF. PE MAUNG TIN, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. ဦးပုညသည်အောက်ပါစာပိုဒ်များကိုမည်သည့်မေတ္တာစာတွင် 15  
မည်သည့်အကြောင်းနှင့်စပ်လျဉ်း၍ရေးသနည်း။ ၎င်းတို့၏အဓိပ္ပာယ်  
ကိုဘော်ပါ။

(က) သေနာပတိ၊ ပြည်ကြီးတင်းခွန်၊ မတ်မင်းမွန်သည်လည်း၊  
ကျွန်မမယ်က၊ ကြင်သမျှထက်၊ အဆထောင်ရာ၊ ချပ်ပေသည့်လက္ခဏာ  
ကြောင့်၊ သာယာမျှရှား၊ နှုတ်ချိုပျားနှင့်၊ နှစ်နားငြိပ်ကြည်၊ မိန့်ခဲ့သည်  
မူ၊ မရှည်စေရ၊ ရက်ကိုဆွေငြိ၊ နှစ်ထကျော်ကျော်၊ သည်မျှသာမျှော်  
နှင့်ထော့၊ ကြင်ဘော်သက်နှိ၊ မတ်တို့ထံသို့၊ ဖြန့်ဖြန့်ဆောက်တည်၊  
ဖြန့်ခဲ့မည်ဟု၊ ဆည်ရည်စံကြွတ်၊ နံသာနှုတ်ဖြင့်၊ ကုမုဒ်ဝတ်တွာ၊ သူ့ကြင်  
ရာကို၊ မှာခဲ့သည်ထချက်။

(ခ) ဗြီးတံသွယ်ရွှေကျီးသည်၊ ပြေလက်ထီးဝဲဆောင်ကာ၊  
နှုတ်ဆာပေါင်သန္တာနှင့်၊ သာယာစွာမြည်ကြွေးလျှင်၊ အဝေးကလွန်  
သထု၊ ထာထော့မည်နိမိတ်ယူလေ့၊ ရှေးထူတို့အမှတ်တည်း၊ နိပါတ်  
နှင့်မတွဲ၊ ဤထုံးကိုထက်စွဲ၍၊ ရွာကွဲရပ်ဝေး၊ တကျေးမျိုးတွေ၊ ပင်း  
မြို့နေတို့ကို၊ မကွေပေါင်းဘော်၊ အထူးပျော်ရအောင်၊ နိမိတ်ဆော်ကျီး  
ဆိုသည်၊ နှုတ်ချိုသံဒေမြနှင့်၊ ခြေကြွကာရပ်ဆိုင်း၊ သာယာတိုင်းလာ  
လမ်းသို့၊ မျှော်တမ်းလျက်နေနှင့်ပါတော့မည်။

2. ဦးပုညသည်အဘယ်ကြောင့်ကျော်စောကြောင်းကိုဆဋ္ဌနံဆင် 10 ဝင်းဝတ္ထုပြုအထောက်အထားပြု၍ အောက်ပါစာပိုဒ်၏အဓိပ္ပါယ်ကို ဘော်ပါ။

သန္တာနွတ်ကျွေး၊ ထုန်သွေးတရှိ၊ ကောဝိဋ္ဌာပွင့်၊ ဟျာဟျာရင့်  
သော၊ ကြက်မင်းဥသျှောင်၊ ဝန်းရောင်ထွင်ထွင်၊ လောဟိတင်မဏိရတ်၊  
ထွတ်ထွတ်နီမြန်း၊ မင်သခန်းအသား၊ ပတ္တမြားကျောက်မွန်၊ သိန်း  
တန်သပြာ၊ ကမ္ပလာရွန်းသစ်၊ တကျွန်းဖြစ်ဖြင့်၊ ဝန်းရစ်ပတ်ခြံ၊ ရံသ  
ကဲ့သို့။

3. အောက်ပါစာပိုဒ်တို့၏အဓိပ္ပါယ်ကိုဆိုလိုရင်းအာဘော်ထင်ရှား 15 အောင်စကားပြင်ရေးသားပါ။

(က) ဆွေမျိုးပေါက်တော်၊ မထော်သည်မှန်သော်လည်း၊ ဝန်  
မတန်သည့်စစ်ထဲ၊ ထမင်းမတန်သည့်ထမနဲ့ကဲ့သို့၊ တောထဲကဆေး  
လည်း၊ လေဘေးကိုတားပေသည်၊ ကိုယ်ထဲတသွေးလည်း၊ သေဘေး  
ကိုပွားစေသည်၊ အဆွေမတူ၊ ဇာတ်တူသော်လည်း၊ သူတော်စင်မှန်  
သောကြောင့်၊ တိရစ္ဆာန်ဖြစ်လျက်၊ လူအသက်ကို၊ ဆက်ဆက်ကယ်တူး  
သည်ဘဝများစွာ၊ လူဖြစ်ပါလျက်၊ အဇာတသတ်၊ အမင်းမြတ်ကို၊  
သတ်ဖြတ်ညှဉ်းဆဲတူးလေသည်။

(ခ) သိက္ခန္တုပိန္နိတာသဗ္ဗာ၊ အက္ခရာရှစ်ခုဖြင့်၊ စက္ကဝါဠေသု၊  
ပြချင်တိုင်းပြုသော်လည်း၊ ဘေးဥပဒ်မရှိ၊ စိတ်ထိုတိုင်းပြုညှဉ်းစုံထွင်၊  
ဤလူထိုဆော်တွင်းတွင်၊ ကျွဲချင်းနှင့်တံပုရာ၊ ထမင်းကျွေးတရားနာ  
ကဲ့သို့၊ သူသာထွင်အကောင်းဆုံးတူ။ နှလုံးကအစွဲပြု၍၊ ခပ်ပုပုတုတ်  
တိုတို၊ ချိုထွသည့်မေတ္တာရေဖြင့်၊ မြို့ရွာလေဘူမိဝယ်၊ ပဝတ္ထိဇနမ၊  
ထာဝရရပ်ဟောင်း၊ ပန်းထောင်းမြို့ချက်မြှုပ်၊ ကျွန်ုပ်မောင်မိုင်း၊ ထုတ်  
တိုင်းကြားရောက်လိုက်ပါသည်။

4. (က) ဦးကြင်ဥရေးသားသည့်ပဒေသာထိချွင်းများကိုသင်ကြား 15  
ရခြင်းဖြင့်ဆရာကြီးဦးကြင်ဥအပေါ်မှာသင်အဘယ်ကဲ့သို့ထင်မြင်ဆ  
နည်း။ ၎င်းဆရာကြီးသည်ပညာရှိ အများအရေးယူထိုက်သောကဗျာ  
ဆရာကြီးတဦးဟုတ်သင့်မဟုတ်သင့်ကိုအကြောင်းထုံထောက်စွာနှင့်  
ထင်မြင်ချက်ကုန်ပါ။

(ခ) အောက်ပါစာပိုဒ်၏အဓိပ္ပါယ်ကိုစကားပြင်ရေးသားပါ။

ကြိုဓမ္မမြင်ဘူးမှယုံစဖွယ်။ ။ ဖြူနီဝါပြာထရနှင့်၊ ခရုထွေထာ  
ထန်း၊ ကမ်းကျွေပတ်လယ်။ ။ ရွှေမင်တံပချွပ်နှင့်၊ ဟန်ရုပ်ပြသွယ်  
သွယ်၊ နတ်မယ်သူဆီထိုး။ ။ ဝင်ကစွတ်၊ မြင်ဆွတ်ကကြည့်ဘို့ရာ၊ ယိုသို့  
ယာသည်ဦးထွားနှင့်၊ အငှါးခန္ဓာမြောင်ရတယ်၊ ထန်းခေါင်ထိမျိုး။

5. ပြန်မာစာစီ ဟိုးရေးသားရာ၌ဥပစာစကားကိုအသုံးပြုခြင်း 10  
၍အကျိုးကျေးဇူးကိုဥဒါဟရဏ်နှင့်ထကွပေါ်ပြပါ။ ။

6. Translate into Burmese :-

15

In primitive times, when aggression and defence were the leading social activities, bodily vigour with its accompanying courage was the desideratum; and then education was almost wholly physical; mental cultivation was little cared for, and indeed was often treated with contempt. But now that our state is relatively peaceful, now that muscular power is of use for little else than manual labour, while social success of nearly every kind depends very much on mental power, our education has become almost exclusively mental. Instead of respecting the body and ignoring the mind, we now respect the mind and ignore the body. Both these attitudes are wrong. We do not yet realize the truth that, as in this life of ours the physical underlies the mental, the mental must not be developed at the expense of the physical. The ancient and modern conceptions must be combined. Perhaps nothing will so much hasten the time when body and mind will both be adequately cared for, as a diffusion of the belief that the preservation of health is a duty. Few seem conscious that there is such a thing as physical morality. Men's habitual words and acts imply the idea that they are at liberty to treat their bodies as they please.

7. Write an essay in Burmese on *one* of the following :— 20

(a) ရာဇဝင်တတ်ခြင်း၏အကျိုးကျေးဇူး။

(b) ပြန်မာနိုင်ငံလူသန်းရောင်းဝယ်ရေး။

(c) ပြန်မာလူမျိုးတို့ဝတ်ပုံထင်ပုံကိုပြောင်းလဲသင့်မသင့်ကြောင်း။

## URDU

*Paper-Setters—*

MAULVI SYED MD. HAIDER.  
MAULVI MD. ISHAQUE, M.A.

*Examiner—*KHAN SAHIB REZA ALI WAHSHAT.

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

*Answers to be given in Urdu.*

1. *Either*, Discuss the influence of the Arabic and Persian languages on Braj Bhāshā. 10

*Or*, Show that Urdu poetry may be said to begin when the Bhāshā meter gave way to the Persian metre.

2. Compare سودا and میر or discuss the saying : 10

بگڑا شاعر مرثیہ کو، بگڑا گویا مرثیہ خوان

3. Write explanatory notes on any two of the following couplets :— 15

(a)

بے ستون کیا ہے کوہکن کیا ہے  
عشق کی زور آزمائی ہے

(b)

ناوک نے تیرے صید نہ چھوڑا زمانے میں  
تڑپے ہے مرغ قبلہ نما آشیانے میں

(c)

چلے میں کہینچ کہینچ کیا قد کو جوں کمان  
تیر مراد پر نہ بٹھایا نشانہ میں

4. Criticize the following state of Muhammad Husain Azād :— 10

اردو کی ابتدائی تصنیفیں نظم سے شروع ہوئیں

5. Criticize the following view of Mir Taqi regarding Khwāja Mir Dard : 10

میر صاحب نے انہیں آدھا شاعر شمار کیا ہے

6. Translate into Urdu :— 15

Al-Ma'mūn, in a letter to the Emperor Theophilus, expressed his desire to visit Constantinople if his public duties would have permitted. He requests of him to allow Leo the mathematician to come to Baghdad to impart to him a portion of his learning, pledging his word that he would restore him quickly and safely again. 'Do not,' says the high-minded caliph, 'let diversity of religion or of country cause you to refuse my request. Do what friendship would concede to a friend. In return, I offer you a hundredweight of gold,

a perpetual alliance and peace.' True to the instincts of his race and the traditions of his city, the Byzantine sourly and insolently refused the request, saying that 'the learning which had made the Roman name illustrious should never be imparted to a barbarian.'

7. (a) Give three idiomatic uses of the following words:—

6

آنکھ - هوا - بات

(b) Derive any four of the following:—

4

نیلام - کمرا - پچاڑہ - تانے نشے - مرغا - بوتام

8. Write an essay on one of the following subjects:—

20

(a) The effect of wealth on national character.

(b) Knowledge is power.

(c) Zauq as a poet: his place in Urdu poetry—the peculiarities of his style.

## MODERN TIBETAN

*Paper-Setter and Examiner*—MR. SATKARI MUKHERJEE. M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate the following passage into Modern Tibetan:—

40

Meanwhile Cedric and Athelstane, the leaders of the troop, conversed on the state of the land, on the dissensions of the royal family, on the feuds and quarrels among the Norman nobles, and on the chance which there was that the oppressed Saxons might be able to free themselves from the yoke of the Normans, or at least to elevate themselves into national consequence and independence, during the civil convulsions which were likely to ensue. On this subject Cedric was all animation. The restoration of the independence of his race was the idol of his heart, to which he had willingly sacrificed domestic happiness and the interests of his own son. But, in order to achieve this great revolution in favour of the native English, it was necessary that they should be united among themselves, and act under an acknowledged head. The necessity of choosing their chief from the Saxon blood-royal was not only evident in itself, but had been made a solemn condition by those whom Cedric had entrusted with his secret plans and hopes. Athelstane had this quality at least, and though he had few mental accomplishments or talents to recommend him as a leader, he had still a goodly person, was no coward, had been accustomed to martial exercises, and seemed willing to defer to the advice of counsellors more wise than himself. Above all, he was known to be liberal and hospitable, and believed to be good-natured. But whatever pretensions Athelstane had to be considered as head of the Saxon confederacy, many of that nation were disposed to prefer to him the title of the Lady Rowena, who drew her descent from Alfred, and whose father having been a chief renowned for wisdom, courage, and generosity, his memory was highly honoured by his oppressed countrymen.

2. *Either*, (a) Give a short description of Zo-wo Atisa's activities and achievements in Sarling.

15

Or, (b) Write a short sketch of the story of Do-wa-sang-mo.

3. Explain with reference to the context the following extracts in your own language :— 15

(a) ཉན་མོངས་ཀུན་གཞིའི་ཀྱ་མཚོ་ཡངས་པ་འདིར།  
 སྤྱི་ཤར་ལོ་རྒྱུ་ལྟ་བུ་འབབ།  
 སྤྱི་ཆད་ངན་སོང་ལས་ཀྱི་དབང་མེད་ན།  
 དེང་སང་ཐུན་ཐུས་ཚོགས་ཚོ་ཅི་མི་འཚོལ།

(b) རིགས་བར་གཉིན་དུ་བསྐྱེད་པའི་བྱ་སྤྲོ་ཡང།  
 མཐོང་བས་དཀའ་ནའང་གསུང་དེས་སྤྱང་ལྟར།

4. Write an essay in modern Tibetan on any one of the following subjects :— 30

- (a) The necessity of female education in Tibet and its adjoining districts.  
 (b) The necessity and benefits of western culture among the Tibetans.  
 (c) Modern civilization in its conflict with the ancient civilization of Tibet and the chances of *rapprochement* between the two cultures.

### ALTERNATIVE PAPER IN ENGLISH.

*Paper-Setter and Examiner*—PROF. HERAMBACHANDRA MAITRA, M.A.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

A.

*Answer two only of the following questions.*

1. Compare and contrast the character of John Henry Newman with that of Henry Edward Manning. 25
2. 'In the real Miss Nightingale there was more that was interesting than in the legendary one; there was also less that was agreeable.' Show how far this is justified by her career. 25
3. State clearly what were the aims of Dr. Arnold as head master. Have his ideals of a liberal education met with general acceptance? 25

B.

4. Explain fully :—

- (a) Virtue may be assailed, but never hurt,  
 Surprised by unjust force, but not enthralled;  
 Yea, even that which Mischief meant most harm  
 Shall in the happy trial prove most glory.  
 But evil on itself shall back recoil,  
 And mix no more with goodness, when at last. 10

Gathered like scum, and settled to itself,  
It shall be in eternal restless change  
Self-fed and self-consumed. If this fail,  
The pillared firmament is rottenness,  
And earth's base built on stubble.

- (b) Blind mouths! that scarce themselves know how to hold 10  
A sheep-hook, or have learnt aught else the least  
That to the faithful herdsman's art belongs!  
What rocks it them? What need they? they are sped;  
And, when they list, their lean and flashy songs  
Grate on their scrannel pipes of wretched straw:  
The hungry sheep look up, and are not fed,  
But, swoln with wind and the rank mist they draw,  
Rot inwardly, and foul contagion spread;  
Besides what the grim wolf with privy paw  
Daily devours apace, and nothing said.

5. Two only of the following questions are to be answered :-

- (a) 'Surely no man could have fancied that he read *Lycidas* 15  
with pleasure, had he not known his author.' Do you agree? Give  
reasons for your answer.  
(b) Refute, after Milton, the sensualist's plea for self- 15  
indulgence.  
(c) Write a brief exposition of the doctrine that 'virtue 15  
alone is free.'

### SANSKRIT HONOURS

*Paper-Setters*— { PROF. D. R. BHANDARKAR, M.A., PH.D.  
MR. KOKILESWAR BHATTACHARYA, M.A.  
MAHAMAHOPADHYAY ASUTOSH SASTRI, M.A.  
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MR. BIHARILAL BANERJEE, M.A.  
.. NILMANI CHAKRABARTI, M.A.  
.. UMACHARAN BANERJEE, M.A.  
MM. BHAGABATKUMAR GOSWAMI, SASTRI,  
M.A., PH.D.

### FIRST PAPER

*Candidates are required to give their answers in their  
own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Give the substance of the speech of the **उद्दिष्ट** to 10  
Yudhishtira in Canto I of the *Kirātārjunīya*. What effect had it on  
the minds of Yudhishtira, Draupadi and Bhīma as manifested through  
their speeches?



2. Translate into English :—

10

(a) विषमोऽपि विगाह्यते नयः कृततीर्थः पयसामिवाशयः ।  
स तु तव विशेषदर्शनः सदृपन्त्यस्य कृत्यवत्स्य यः ॥

(b) प्रभवः खलु कोषदण्डयोः कृतपञ्चाङ्गावनिर्णयो नयः ।  
स विधेयपदेषु दत्ततां निर्यातं लोक इवानुबध्यते ॥

(i) Explain कृततीर्थः in extract (a). In what sense is it used when applied to नयः ? 4

(ii) Expound the *samasa* in कृतपञ्चाङ्गावनिर्णयः in extract (b) 4  
What are the पञ्चाङ्ग's ?

(iii) Point out the appropriateness of the simile contained in extract (b). 4

3. Expand in Sanskrit with reference to the context :— 5

विचित्ररूपाः खलु चित्तवृत्तयः ।

4. Scan the following :— 5

विट्धति मोपधि म'स्वदूषणानि ।

5. Translate into English the following extracts :— 7

(a) न चात्मदृष्टान्तेनापन्नत्वाद् दुःखित्वमनुमातुं शक्यते । धीरादिष्वने-  
कान्तिकत्वात् इत्याशयेनाह । चित्तवृत्तयो विचित्ररूपाः ।

(b) यद्यपि अथ प्रसङ्गस्य अमङ्गलः अधिपूर्वात् करोतेः अधः प्रसङ्गे  
इत्यात्मनेपदं न भवति प्रसङ्गपरिभवः इति काशिका । तथापि अस्याः कर्तृभिर्प्राय-  
विवक्षायामेव प्रयोजकत्वात् कर्तृभिर्प्रायं स्वरितञितः इति आत्मनेपदं प्रसिद्धम् ।

6. In what cases is the killing of an enemy forbidden by Manu? 8

7. Translate into English :— 10

(a) तैर्विदोभ्यस्त्वयो विद्यां दण्डनीतिश्च शाश्वतीम् ।  
आन्वोदिकीञ्चात्मविद्यां वार्त्तारम्भांश्च लोकतः ॥

(b) वक्वश्चिन्त्येदर्थान् मिहवच्च पराक्रमेत् ।  
वक्वश्चावलम्बेत शशवच्च विनिष्पन्तेत् ॥

8. Comment on the following after Kullūka :— 8

एताः प्रकृतयो मूलं मण्डलस्य समामतः ।

अष्टौ चान्याः समाख्याता हादृशैव तु ताः स्मृताः ॥

9. Translate into Sanskrit :—

25

(a) By truth the earth is supported, by truth the sun gives heat, by truth blows the wind, on truth all is established.

(b) But once do kings give orders; but once speak the wise; but once is given a maiden in marriage; all these things are done but once.

(c) One noble son, good and wise, illuminates the whole of his kin, as the moon the night.

(d) From association with the good fools become noble, but from association with fools noble men remain pure; the earthen vase draws to itself the odour of the flowers therein, but the flowers absorb none of the scent of the vase.

## SECOND PAPER.

## DRAMA.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Two different sources were available for the plot of the *Ratnāvalī*. To which of these was the author indebted for his plot? Was the incident of the monkey-raid an original idea of the author, or was it borrowed from another source? 8

*Or*, There were difficulties in the way of the alliance of king उदयन with रत्नावली. How were these difficulties surmounted, and how was the plan arranged which eventually brought about the union of these two? What part did the introduction of the magician play in this plan?

2. *Either*, Write down in a connected form the incidents narrated in the Introduction (प्रवेशक) to the sixth act of the *Abhijnāna-Sakuntalam*. 8

*Or*, Who was सानुमती? What kind of confidential mission was entrusted to her by शकुन्तला? With what measure of success did she discharge this mission? What was the object of the mission?

3. Give in your own words the substance of any *two* stanzas, selecting only one from each of the following groups, with clear reference to the context of each :— 8

## GROUP A.

- (a) मंप्राप्तं मकरध्वजेन मथनं त्वत्तो मदर्थे परा  
तद् युक्तं बहुमार्गगां सम पुरो निर्लज्ज बोदुस्तव ।  
तामेवानुनयस्वभावकुटिलां हे ऋणकण्ठरट्टं  
मुञ्चेत्याह रुषा यम द्रतनया लक्ष्म्या पायास्त वः ॥
- (b) लीलावधूतपद्मा कथयन्ती पक्षपातमधिकं नः ।  
मानसमुपैति कैयं चित्तगता राजहंसीव ॥

## GROUP B.

- (a) कनकसोशीरं प्रशिथिलमणालैक उल्लयं  
प्रियायाः साबाधं तदपि कमनायं वपुरिदम् ।  
समसापः कामं मनसिजनिदाघप्रसरयो-  
र्न तु योक्षस्यैवं सुभगमपराङ्मुखा युवतिषु ॥
- (b) यद् यत् साधु न चित्ते स्थात् क्रियते तत्तदन्वया ।  
तथापि तस्या लावण्यं रेखया किञ्चिदन्वितम् ॥

- (i) In Group A (a) distinguish grammatically between the forms मथन and मथन, 4

Some of the editions read बोदुं instead of बोदः in the second line of extract (a); which reading do you prefer and why?

(ii) In Group B (a) give the alternative form of **मनसिज**, 5  
stating your reasons.

Derive the word **युवति**, and give its other forms, if possible.

(iii) In extract (b) what is **लावण्य** and how would you 2  
derive it?

4. Translate into English any *two* of the following extracts, 8  
giving the context in each case :—

(a) किं पद्मस्य रुचं न हन्ति नयनानन्दं विधत्ते न किं  
वृद्धिं वा भक्षकेतनस्य कुरुते नालोकमात्रेण किम् ?  
वक्त्रेन्दौ तव सत्यं यदपरः शोतांशुरभ्युद्यते  
दर्पः स्यादसृतेन चेदिह तदप्यस्येव बिम्बाधरे ॥

(b) अनाग्रातं पुष्पं किसलयमन्तं कररुद्धं-  
रनामुक्तं रत्नं मधु नवमनास्वादितरसम्  
अखण्डं पुष्पानां फलमपि च तद्रूपमनघं  
न जाने भोक्तारं कमिह समुपस्थास्यात् विधिः ॥

(c) इदमुपनतमेवं रूपमस्ति कालि  
प्रथमपरिगृहीतं स्यात् वेत्यव्यवस्यन् ।  
धमर इव विभाति कुन्दमन्तस्तृषां  
न च खलु परिभाक्तुं नैव शक्तामि हातुम् ॥

(i) In extract (a) analyse the compounds **वक्त्रेन्दौ** and 4  
**बिम्बाधरे**. Account for the third case-ending in **असृतेन**.

(ii) In extract (c) conjugate the root in **हारुं** in **लोट्** second pers. 3  
sing.

(iii) Give the senses in which **उप + स्था** takes the **आत्मनेपदी** 3  
form. Account for **परस्मैपद** in **समुपस्थास्यति** in extract (b).

5. Paraphrase any *one* of the following stanzas, using as far as 4  
possible words other than those in the texts, and breaking up the  
compounds :—

(a) प्रत्ययमज्जनविशेषविविक्तकालिः  
कौसुम्यरागरुचिरस्फुरदंशुकाला  
विभ्राजसे मकरकेतनमर्चयन्ता  
बालप्रबालविटपिप्रभवा ननेव ॥

(b) विच्छित्तिशोभैः सुरसुन्दराणां  
वर्णैरमी कल्पलतांशुकैषु ।  
सखिन्य गोतिलममर्शयन्  
दिवीकमस्तुषारितं लिखन्ति ॥

6. What have you come to learn about the following from your 8  
texts?—

- (a) The hospitality of the ancient Hindus.
- (b) Reading, writing, and painting—as accomplishments  
of the ladies.
- (c) Intercourse with countries beyond India.
- (d) Effects of physical exercises.

7. Who is हंसपदिका and what feature of दुष्यन्त's character does her song throw light upon? 2

8. Expand the thoughts contained in any three of the following extracts :— 6

- (a) अत्यन्तमाननोयेष्वपि निरनुरोधवृत्तिस्वामिभक्तव्रतम् ।  
 (b) अनन्तक्रमणायानि श्रेयांसि प्रदक्षिणोक्त्य भगवन्तं गन्तुमिच्छामि ।  
 (c) स्फुलिङ्गावस्थया वर्ज्जरुधापेक्ष इव स्थितः ।  
 (d) सर्व्वमपि शीतारकस्य अभ्यवहारे एव पर्य्यवस्यति ।  
 (e) मृत्युरपि न श्लाघ्यते, यस्य हि रिबोऽपि पुष्पकारमेवं वर्णयन्ति ।

9. Write a short note on कौशल्या mentioned in the *Ratnāvalī* and on हंसकूट found in the *Sakuntalā*. 2

10. Translate the following into Sanskrit : - 25

(a) When the king and his son Rāma were returning home after the marriage of the latter to Sītā, he was alarmed by the ill-omened sounds uttered by certain birds. Then a hurricane shook the earth, uprooting the trees, and thick darkness veiled the sun. Finally, Parasu-rama appeared, fearful to behold, brilliant as fire, with his axe in his hand.

- (b) To injure none by thought or word or deed,  
 To give to others, and be kind to all -  
 This is the constant duty of the good.  
 High-minded men delight in doing good,  
 Without a thought of their own interest.

### THIRD PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any two of the following extracts :—

(a) तथाविधं च व्यतिकरे तत्तादृशमचित्थमप्रतिविधेयमपूर्वमेव दुर्गन्धोपक्रम- 15  
 स्वरूपमुपलभ्य बलवता विरहहतस्य तदनुप्रवेगकारित्वमपि नातो निर्णेतमकोति  
 नयविचक्षणः क्षणेनैव सर्वापेक्षपुरःसरं धर्मपालः प्रतिपद्य सेवासुपनतो बभूव ।  
 कलादित्यस्तु तं समर्पेतापचारमस्वमेकायमये विधाय दुर्गन्धं सपत्न्यापारणपरिश्रमार्णसा  
 मिलितैः समरपासुभिः कर्दामतेन वपुषा हार एव भूषणसंचटितकिरीटकोटिना मसकैः  
 कृतप्रणामः सरभमसादृत्य समालिङ्गितोऽयजन् सविनयमुपाविशत् ।

(b) इहा च तां सविश्रयम् आः ! सदूरमागतोऽस्मि नन्दावटपुरादियं भगवतो 15  
 दशभिर्याज्ञैराख्यायते मित्स्वरुहो मे प्रहृत्तरायहस्य, भवतु किमनेन प्रसूतं तमेव  
 गवेयामि तावदित्युभयतोरवार्तं तु तव घनपतिष्ठां पेटकेषु निपुणं निक्षिप्य चक्षुरालोक्य-  
 मानोऽपि ममन्ताम्रमङ्कापि हृष्टः शकुनिरित्य भगवान् भुवनेकचक्षुरादित्यः रुह्य  
 दिवसविसारमपरस्यां दिशि प्रयागवान् । अथ तथा हृद्यमाने क्लेशे एवं भावतवान् ।  
 साध्यमसाध्यं च विषयमालोक्य विचरतां विफलाभवत्येव दुःसां प्रयासः । तदे-

तदतिमहीयसो मोहस्य विलसितं यथादेवमुपपाते विवेकिनामप्येकहृलयेव परिधंशो मतेः ।

(c) उत्थाय च प्रविश्यान्तरध्यासिता मरालतूलकोमलं तल्पमादाय भूयोऽपि 16  
मत्कारनसात् पटमवहितौक्य मां कृतादरमपृच्छत्—वयस्ये तारावलि ! जानांस क एष  
दृष्टः कुतश्चिदन्यत्र प्रत्यक्षमालिख्येन वा त्वया हि बहुशशितेन वर्णिता दृष्टास्यसि भुवनविवर-  
वर्तिनो युवानः, तेषां मध्ये कश्चिदमुना रूपेण संवित्सिमेति भवत्या हृदयस्य, कन्दर्प-  
लुब्धकशायं दुरात्मा सुदृढमिमां मनाङ्गारणौ सूक्ष्मपदार्थं मे क्वाटव्याजहार कृष्णसारं  
लोचनद्वन्द्वं श्वविध्यश्च प्रचलरूपं मानसमिदानौ कथय किमवंगते प्रातिविधेयमिति ।

2. Discuss fully the grammatical points raised in any four of the following :— 12

- भाष्याब्धिः कालिगन्धीरः ।
- न्यक्ताक्षरा धातुरसेन यत् ।
- सहैव दशभिः पुनैः भार वहति गर्दभी ।
- वृत्तिं ह्ययं नमस्कुर्मः ।
- प्रत्यक्षाभिः प्रपन्नस्तनुभिरवतु वः ।
- स सन्ततं दर्शयते गतस्त्रयः ।

3. Explain fully any four of the following, giving examples wherever necessary :— 16

- कारक ।
- समास ।
- उपपदविभक्ति and कारकविभक्ति ।
- पुंवदभाव and कसंप्रवचनीय ।
- षष्ठी as a कारक and when not a कारक ।

4. Answer any three of the following, stating full grammatical reasons and references in each case :— 12

- Under what conditions does a word denoting काल take the second, third, fifth and seventh cases?
- Is there any way in which a अव्ययीभाव compound can be distinguished from other Samāsas? What are the difficulties?
- How can you justify the first case in सिद्धिः in सिद्धौ मानवकः? Explain the difficulty that may be anticipated and the way in which it may be removed.
- How do you explain the first case in नरः in नरः पक्षि according to the rules of Pāṇini's grammar?

5. Give an account of the essential features of Sanskrit lyrical or didactic literature. 10

6. Either, Give an account of the development of prose romances and champūs in Sanskrit. 20

Or, Trace the development of the theories of Sanskrit poetry.

## FOURTH PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Describe, in simple Sanskrit or English, the scenes as represented in either (a) or (b) :— 8

(a) नारीणामपनुदुर्न देहविदा-  
नारीणामलमलिला हिरण्यवायः ।  
नारीणामनलपरीतपवपुष्पान्  
नारीणामभवदुपेत्य शर्म तृचान् ॥

(b) बभौ मरुत्वान्विहृतः समुद्रो-  
बभौ मरुत्वान्विहृतः समुद्रः ।  
बभौ मरुत्वान्विहृतः समुद्रो-  
बभौ मरुत्वान्विहृतः समुद्रः ॥

2. What word should be understood after उपेत्य in (a) of the above extracts to make the sentence grammatically complete? Give reasons for your answer. Explain the meaning of the word समुद्र in each foot of (b) above. 4

3. Translate into English :— 8

(a) एकः पदातिः पुरुषो धनुष्मान्  
योऽनेकमायानि विशद्वता न ।  
रक्षःसहस्राणि चतुर्दशार्दोत्  
का तव वो मानुषमावशङ्का ॥

(b) ब्रह्मर्षिभिर्नम्यं सदैवैः  
सन्तापितै रात्रि वरक्षयाय ।  
नराकृतिर्वानरभैरन्यशालौ  
जगत्त्रय्यो विहितोऽभ्युपायः ॥

(i) Who is the speaker of these verses? Explain the special significance of all the adjectives in (a). 4

(ii) Derive रात्रिचर and अजय्य in (b). Give the optional derivative form of रात्रिचर and distinguish between अजय्य and अजेय with reference to the grammatical rule. 4

4. Either, Quote, or give the substance of, verses where Vibhī- 8  
ṣaṇa shows the impossibility of a successful employment of the expedient of dissension (मैद) to win over the allies or any ally of Rāma.

Or, Quote, or give the substance of, a verse in which the same speaker's argument is based upon the following text of Manu :—

अमनस्य च मन्थोच कष्टं व्यसनमुच्यते ।

असत्यधीधो व्रजति सत्याव्यसनी मतः ॥

5. Refer to the context and explain any *two* of the following :— 4

- (a) को वा हैतुरनाय्याणां धर्मा नान वार्त्तुम् ॥  
 (b) सिध्यन्ति कार्याणि सुमन्विता न ॥  
 (c) प्रज्ञा तु मनोऽधिकृता न शीघ्रम् ॥

6. Give the purport of the following in Sanskrit or English :— 6

हिजिन तेनाक्षतकण्ठकोण्डया  
 महामनोमोहमलोमस'न्या ।  
 अलम्बवैदग्द्विलासलौलया  
 धिया नबह्वेयमतिहयी कथा ॥

Some scholars explain अतिहयी कथा in the above 2  
 verse as alluding to certain more ancient romances; if so, name the  
 works which might possibly be alluded to by its author.

7. Translate into English any *two* of the following extracts, 12  
*excluding the underlined words in the same* :—

(a) अवनिर्पातस्तु... प्रतोहार्या निर्दिश्यमानां तामुन्मदहलिहलापकर्षण-  
 भयप्रपलायितामिव यमुनां प्रावृषामिव चनकेशजालामरण्यभूमिमिव रूपसम्पन्नां  
 दिव्ययोषितमिवाकुलीनां मधुमासकुसुमससृङ्गिमिव विजातं यक्षाधिपलक्ष्मीमिवालको-  
 ङ्गासिनीमविरोपकद्रव्यैवनाम'तशयरूपाकृतम नमेषलोचनो ददर्श ।

(b) अन्त्यायतय यस्मिन् दश'थसुतशरनिर्पातितो योजनबाहोर्बाहुरगम्यप्रमाद-  
 नागतनहुषाजगरकायशङ्कामकरोद्विजनस्य । जनकतनया च भर्ता विरहविनोदनार्थ-  
 सुट्ठाभ्यन्तरलिखिता यव रामनिवामदर्शनात्सुका पुनरिव धरणीतलादुल्लसन्ती  
 वनचरैरद्याप्यलोक्यते ।

(c) तस्यैवावधस्य पद्मसरसः पश्चिमे तीरे दुर्योधन इवोपलक्षित शकुनिपक्षपातो  
 नलिननाभ इव वनमालापगुदो नवजलधर इव नभसि दर्शितोन्नतिरालोकनप्रासाद इव  
 वनदेवतानां नायक इव सर्ववनस्यतोनां मखव विभ्यस्य शाखाबाहुभिरुपगुह्यैव विभ्याठवी-  
 मवस्थितो महान् शान्मलौहचः ।

(i) Select the synonymous adjectives in the above extracts, 8  
 and explain how they also qualify the underlined words in the same.

(ii) Explain the allusions in the parts of the above extracts 4  
 marked A or B below :—

A. उन्मद...यमुनाम् [Question 7 (a)].

B. दशरथसुत...नहुषाजगरशङ्काम् [Question 7 (b)].

(iii) Explain the propriety of पुनरिव in (b). Give the exact 4  
 meaning of उपगुह्य in (c). What relation between शान्मलौहच and विभ्याठवी  
 is poetically suggested?

8. Render into idiomatic Sanskrit either (a) or (b) :— 25

- (a) Then flashed the giant's eye with fire  
 Like that which lights the funeral pyre.  
 Forth from his palace, at his heat,  
 Twice forty thousand warriors pressed.

They saw Hanúmán near a porch,  
 And, thick as moths around a torch,  
 Rushed on the foe with wild attacks  
 Of mace and club and battle-axe.  
 As round him pressed the Rakshas crowd,  
 The wondrous monkey roared aloud,  
 That birds fell headlong from the sky :  
 Then spake he with a mighty cry :  
 'Hanúmán I, the Wind-God's seed :  
 Beneath this arm the foemen bleed.  
 I fear not, unapproached in might,  
 A thousand Rávas ranged for fight.  
 I will, before the giant's eyes,  
 Their city and their king chastise.'

- (b) The Wind-God's son a temple scaled  
 Which, by his fury unassailed,  
 High as the hill of Meru, stood  
 Amid the ruins of the wood ;  
 And, in his fury thundered out  
 Again his haughty battle-shout :  
 'I am the slave of Kosal's king  
 Whose wondrous deeds the minstrels sing.  
 A thousand Vánar chiefs like me  
 Roam at their will o'er land and sea  
 And all, unconquered in the fray,  
 Our King Sugriva's word obey.  
 Backed by his bravest myriads, he  
 Our warrior lord will cross the sea.  
 Then Lañká's lofty towers, and all  
 Your hosts and Rávan's self shall fall.

### FIFTH PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*SEVEN questions only are to be attempted, of which Question 1 is compulsory.*

1. Render any *four* of the following into English, showing in brackets the original words after their equivalents in your translation :

(a)

अभीष्टं न कश्चिदपि शक्यम्

किरणशय्यं यत्नतो हस्तम् ।

आस्थाद्वयं सविता चिद्वभानुः

कृत्वा रजसि तविषीं दधानः ॥



(b) जिह्मं नुनुद्रेऽवतं तथ दिशा-  
 सिञ्चन् गीतमाय तृणज ।  
 आ गच्छन्तीमवसा विवभानवः  
 कामं विप्रस्य तर्पयन् धामभिः ॥

(c) यं खा पृच्छन्त कुह सीत घोरम्  
 उतेमाहर्नेषो अनीत्येनम् ।  
 सो अर्थः पृष्टीर्विज इवा मिनाति  
 अदक्षौ धनं स जनास इन्द्रः ॥

(d) अनमीवास इच्छेय मदनो  
 मितजबो वरिमन्ना पृथिव्याः ।  
 आदित्यस्य व्रतमुपचिन्ता  
 वयं मितस्य सुमती स्याम ॥

(e) स सुष्टुभः स ऋक्ता गणेन  
 वलं करोज फलिगं रवेण ।  
 बहुस्पतिकस्त्रिया इव्यमूढः  
 कनिष्ठादहावशतीरुदाजत् ॥

(f) पृक्ते तदेनो वरुण दिदृच्छ-  
 पो एमि चिकितुषो विपृच्छम् ।  
 समानमिन्द्रे कवयः सदाहुर  
 अयं ह तुभ्यं वरुणो हवीते ॥

3. (a) Name and specify the peculiarities of the metres of these six Rks. 14  
 (b) Re-write Rk (c) in the Pada form, showing the proper accents.  
 4. Write full mythological notes on Rks (b) and (c). 14  
 5. Paraphrase the following in classical Sanskrit according to Sāyana, and write brief notes in English where different interpretations have been proposed by European scholars :— 14

हवोमभिर्हवते यो हविर्भिर

अव सोमेभौ रुद्र' दिषीय ।

ऋद्धरः सुहवो मा नो अह्यै

बभूः सृष्टिमी रीरधन्मनायै ॥

6. (a) Translate freely into English :—

14

विष्णोर्नु कमिति षडृचं पञ्चदशं सूक्तं दैर्घतमसं वैष्टुभं दैष्णवम् । अत्रानुक्रमशिका । विष्णोः षड्वैष्णवं ह्येति । अभिप्रवषडृष्टेष्वथेषु तृतीयसवने सोमहृद्वाव-  
 ष्वावाकस्य सोमातिशंसनार्थमिदमादिमुक्तद्वयं विनियुक्तम् । सोमे वर्धमान इति खण्डे सूचितम् । विष्णोर्नु कमिति सूक्ते परो मावयत्येषावाक इति । तथा तृतीयसवने सोमातिरेक उत्तरोत्तरसंस्थोपगन्तव्या आतिरात्रात् । ततोऽप्यतिरिक्ते तदर्थमेव शस्त्र-  
 सुपजनयितव्यम् । तत्रैतदेव सूक्तं सामातिरेक इति खण्डे सूचितम् । महा इन्द्रो नृवद्विष्णोर्नु कमिति । आग्निमारुतशस्त्रे आद्या विनियुक्ता । अथ यथेतमिति खण्डे सूचितम् । विष्णोर्नु कं वीर्याणि प्रवीचं तन्तुं तन्वनृजसो भानुमन्विहीति ।

(b) Annotate all the important words and names occurring in the passage quoted in (a) of this Question.

7. Comment on the peculiar forms of Vedic grammar occurring in any four of the Rks cited in Question 1. 14

8. (a) Show in what way the language of the *R̥gveda* differs from classical Sanskrit. 14

(b) Point out the uses of the Vedic subjunctive.

(c) What are the phonetic peculiarities of the Vedic dialects?

9. What do you think to be the age of the *R̥gveda*? 14

10. Give a brief account of the Akhyāna or Samvāda hymns in the *R̥gveda*. 14

### SIXTH PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

#### GROUP A (GRAMMAR).

*Answer any FOUR from GROUP A.*

1. Explain the following *sūtras* with examples :—

15.

खतन्मः कर्मा । तुमर्थाश्च भाववचनात् । आत्मनश्च । न कीपधायाः ।  
 जातिश्च ।

2. (a) Is there any difference of meaning between पुष्पाणि सृजयति 5  
and पुष्पेभ्यः सृजयति ?
- (b) How do you support *Sampradāna* in नृपाय निवेदयति ? 5
- (c) Explain the *Paribhāṣā* referred to in लिङ्गाविशिष्टपरिभाषया 5  
युवतिशब्दोऽपि समस्यते ।
3. Fully explain :— 15
- (a) निमित्तमिह फलम् । योगः संयोगसमवायात्मकः ।
- (b) द्रव्यैक्य एव । अर्धं पिप्पलीनाम् ।
- (c) प्रतिषेधसामर्थ्याद्विशेषणसमासोऽपि न ।
4. (a) Give a critical note on the importance of recognizing 10  
the system of योगविभाग in the aphorisms of grammar.
- (b) Name and expound the following compounds :— 5
- अङ्गुलीभयः । अष्टागवम् । तावद्धार्यः । द्यावाक्षानि । प्रपणः ।
5. (a) Derive the term *Karmapravacanīya* and show how it 9  
differs categorically from *Upasargas*. Elucidate the meaning of the  
expression पञ्चान्यो अपमनु प्रावर्षत् ।
- (b) Comment on the following :— 6
- परार्थान्निधानं वृत्तिः । क्रियानिमित्तं कारकम् ।

GROUP B (*Alamkāra*).

Answer any FOUR from GROUP B.

6. Do you consider the characteristics of a *kāvya*, as enumerated 10  
by Viśvanātha, to be more exhaustive and accurate than those  
of Daṇḍin? Do all the *kāvyas* known to you strictly fulfil these conditions? Give reasons for your answer.
7. Amplify :— 10
- कृते कवित्वेऽपि जनाः कृतश्रमाः  
विदग्धगोष्ठौघ विहर्तुमीशते ॥
8. Define and illustrate— 10
- प्रस्थानम् । अनुवर्त्तनम् । विस्मयः । आख्यायिका ।
9. (a) Fully explain :— 5
- यथाकथञ्चित् सादृश्यं यदोद्भूतं प्रतीयते । उपमा नाम सा— ।
- (b) Enumerate some of the important varieties of *upamā*. 5
10. Define and illustrate :— 10
- विरोधः । व्यतिरेकः । तुल्ययोगिता । सङ्कोक्तिः ।

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## FIRST PASS PAPER

*Candidates are required to give their answers in their own words  
 as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English either of the following groups of 18  
*ślokas* :—

## GROUP A.

(a) विश्वमानो भवतः पराभवं  
 नृपासनस्थोऽपि वनाधिवासिनः ।  
 दुरीदरश्च जितां समीक्षते  
 नयेन जेतुं जगतीं सुयोधनः ॥

- (b) मतिमान् विनयप्रमाथिनः  
समुपेक्षेत समुन्नतिं द्विषः ।  
सुजयः खलु तादृगन्तरे  
विपदन्ता ह्यविनीतसम्पदः ॥
- (c) स राजा पुरुषो दण्डः स नेता शासिता च सः ।  
चतुर्णामाश्रमाणां च धर्मस्य प्रतिभूः स्मृतः ॥
- (d) सप्तकस्यास्य वर्गस्य सर्वतैवानुषङ्गिणः ।  
पूर्वं पूर्वं गुरुतरं विद्याद्वयसन्मात्मवान् ॥

## GROUP B.

- (a) पुरःसरा धामवतां यशोधनाः  
सुदुःसहं प्राप्य निकारमौदृग्म् ।  
भवाद्दृशाद्येदधिकुर्वन्ते रतिं  
निराश्रया हन्त हता मनस्विता ॥
- (b) द्विषतामुदयः सुमेधसा  
गुरुरस्वन्तरः सुमर्षणः ।  
न महानपि भूतिमिच्छता  
फलसम्पत्प्रवणः परिचयः ॥
- (c) अद्यात् काकः परोडाशं सा च लिह्याद्विस्थिता ।  
स्वाभ्यं च न स्यात् कश्चिंश्चित् प्रवर्तेताधरोत्तरम् ॥
- (d) नित्यमुद्यतदण्डः स्यान्नित्यं विवृतपीरुषः ।  
नित्यं मंथतमंवार्यो नित्यं छिद्रानुसार्यरः ॥

2. (a) Comment on the formation of *दुरोदरम्* and *सुमेधसा*. 3  
(b) Account for *वष्टौ* in *धामवताम्* and *ātmanepada* in *अधिकुर्वन्ते* 3  
in B (a).  
(c) Derive *शासिता* and *स्वाम्यम्*. Conjugate the root of the 4  
former word in *loṭ* second person singular and in *laṅ* third person plural.  
(d) Suggest an alternative form for *निकार*. 1  
(e) Expound the *samāsa* in *विनयप्रमाथिनः* and *फलसम्पत्प्रवणः* 3  
as used above.  
(f) Name the vices referred to by the underlined expression in 4  
A (d).  
3. Give in simple Sanskrit sentences of your own the substance 3  
of *either* of the following *śloka*s :—

- (a) व्रजन्ति ते मूढधियः पराभवं  
भवन्ति मायाविषु ये न मायिनः ।  
प्रविश्य हि घ्नन्ति शठाक्षयाविधान्  
असंहताङ्गान्निशिता इवेववः ॥

- (b) अभिवर्धति योऽनुपालयन्  
विधिवोजानि विवेकवारिणा ।  
स सदा फलशालिनीं क्रियां  
शरदं लोके इवाधितिष्ठति ॥

Change the voice of the second half of *either* of these *ślokas*. 8

4. Annotate *either* of the following *ślokas* :— 10

- (a) धन्वदुर्गं महीदुर्गमब्दुर्गं वार्चमेव वा ।  
वृदुर्गं गिरिदुर्गं वा समाश्रित्य वसेत् पुरम् ॥
- (b) अमाल्यराष्ट्रदुर्गार्धदण्डाख्याः पञ्च चापराः ।  
प्रत्येकं कथिता स्त्रिताः संक्षेपेण हिसमतिः ॥

5. *Either*, What, according to Mann, are the guiding principles of taxation? How should gold, crops and perfumes be taxed? What kind of tax should an artisan pay? 8

Or, Write a clear note on *dūta*—his usefulness, functions and qualifications. 8

6. Refer to the context and explain fully any *two* of the following extracts :— 8

- (a) परप्रणीतानि वचांसि चिन्ततां  
प्रवृत्तिसाराः खलु मादृशां गिरः ॥
- (b) न समयपरिरक्षणं चमं ते  
निकृतिपरेषु परेषु भूरिधानः ।
- (c) प्रभवः खलु कोशदण्डयोः  
कृतपञ्चाङ्गविनिर्णयो नयः ।
- (d) सङ्गते न जनोऽप्यधःक्रियां  
किमु लोकाधिकधाम राजकम् ॥

Derive राजकम् and parse परेषु in (b). 2

- f. Translate into Sanskrit :— 25

- (a) Not with other men's faults and other men's failings,  
Nor the things they have done, nor the things left undone,  
Should the wise man be concerned;  
Let him look to his own things done and undone.
- (b) Just as a flower is fair in its colour,  
But if it lack odour its beauty is hollow;  
So fair are words well-spoken  
But empty the words which deeds do not follow.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Discuss the dramatic necessity of the sixth act of *Sakuntalā*. 10

*Or*, Explain fully the dramatic propriety of the curse of *Durvāsa* in the matter of the development of the play.

2. *Either*, What part is played by the *Vidūṣaka* in *Abhijñānaśākuntalā*? 9

*Or*, Contrast the characters of *Sārṅgarava* and *Sāradvata* as revealed in the Court Scene.

3. (a) Translate into English and then fully annotate in English any three of the following :— 18+8  
=26

- (i) असंशयं चतुपरिग्रहचम  
यदार्यमस्यामभिलाष मे मनः ।  
सतां हि सन्देहपदेषु वस्तुषु  
प्रमाथमनःकरणप्रवृत्तयः ॥
- (ii) कामं प्रिया न सुलभा मनस्तु तद्भावदर्शनाश्रांसि ।  
अकृतार्थेऽपि मनसिजे रतिसुभयप्रार्थना क्रुते ॥
- (iii) सायंतने सवनकर्मणि संप्रवृत्ते  
वेदिं हुताशनवतीं परितः प्रयस्ताः ।  
छायाश्चरन्ति बहुधा भयमादधानाः  
संस्थापयोदकपिशाः पिशिताशनानाम् ॥
- (iv) अर्थो हि कत्वा परकीय एव  
तामस्य संप्रेष्य परियहीतुः ।  
जातो ममायं विशदः प्रकामं  
प्रत्यर्पितव्यास इवान्तरात्मा ॥
- (v) शौक्ल्य कृमाचमवसाययति प्रतिष्ठा  
क्लिन्नाति लब्धपरिपालनवृत्तिरेव ।  
नातिश्रमापनयनाय यथा श्रमाय  
राज्यं स्वहस्तधृतदण्डनिवातपदम् ।
- (vi) संरोपितेऽप्यात्मनि धर्मपत्नी  
त्यक्ता मया नाम कुलप्रतिष्ठा ।  
कल्पिष्यमाणा मङ्गते फलाय  
विश्वेश्वरा काल इवोत्तमौजा ॥

- (vii) भवनेषु रसाधिकेषु पूर्वं  
चित्तिरचार्थसुशान्ति ये निवासम् ।  
नियतैक्यतिव्रतानि पश्चात्  
तत्समूलानि गृहीभवन्ति तेषाम् ॥

(b) Comment grammatically on any four of the following :—  
असंशयम् and प्रमाणम् in (i) ; मनसिज्ज and उभयप्रार्थना in (ii) ; अवसाययति  
in (v) ; संरोपिते and फलाय in (vi) ; चित्तिरचार्थम् and पश्चात् in (vii).

4. Either, Give in your own words, either in English or in Sanskrit, the main plot of *Ratnāvalī*, and indicate the original sources of this drama. 8

Or, Describe either in English or in Sanskrit the *Madana-mahotsava* of Kausambi.

5. Explain fully either in English or in Sanskrit :—

6+2  
=8

सप्राप्तं मकरध्वजेन मथनं त्वत्तो मदर्थे पुरा  
तद् युक्तं बहुमार्गिणां मम पुरो निर्लेज्ज वोदुक्षव ?  
तामिवानुनयस्वभावकुटिलां हे कृष्णकण्ठयज्ञं  
सुखेत्याह कषा यमद्रितनया लज्जाय पायात्स वः ।

Does it foreshadow the main theme of the drama? If so explain how.

6. Either,

6

उद्दामोत्कलिकां विपाळुररुचं प्रारब्धवृष्णां क्षणा-  
दायासं श्वसनोद्गमैरविरतैरातन्वतीमात्मनः ॥  
अयोद्यानलतामिमां समदनां नारीनिवासां ध्रुवम्  
पश्यन् कोपविपाटलयुतिसुखं देव्याः करिष्याम्यहम् ॥

Explain the whole matter condensed in this verse.

Or, Explain fully what is passing in the king's mind when he exclaims :—

कष्टं भोः कष्टम्  
किं देव्याः कृतदोषैरोषमुषितस्त्रिगुणितं तन्मुखं  
वक्षां सागरिकां क्रमोद्धतरुषा किं तत्तर्ज्यमानां तथा ।  
वद्वा नीतमितो वसन्तकमहं किं चिन्तयामीत्यहो  
सर्वाकारकृतव्यथः क्षणमपि प्राप्नोमि नोऽनर्हतिम् ॥

तत् किमिदानीमिहस्थितेन प्रयोजनम् । देवीं प्रसादयितुमभ्यन्तरमेव प्रविशामि ।

7. Either, Comment grammatically on any four of the following :— 8

- (a) मा अन्यथा सम्भावम् ।  
(b) सा ... दुःखं मया स्थापिता ।  
(c) पाताल ... मां ... संशययतीव भुजङ्गलोकाः ।  
(d) मामवधीर्य कुतोऽतिक्रामांसि ।  
(e) प्रियवयस्य निवेदयामि ।  
(f) प्रियवयस्य आगच्छति ... एनमुपसर्दामि ।



Or, Sanskritize the following :—

वास°—अज्ज भज्ज अं एव्व किं ण भणामि जइ पड़िवादिहि से रक्खणावल्लिणि ।

विदू°—भोदि सुइ, तुए जाणिदो अमच्चस्य आसत्त ।

वास°—एहि रक्खणावल्लि एहि । एत्तिअं वि दाव मे वहिणियाणुकवं भोदु । ...

पड़िच्छदु मम वहिणियं रक्खणावल्लि अज्जउत्तो ।

8. Translate into Sanskrit :—

25

When a youth is invested with the sacred thread, he must reside in the house of his preceptor and apply himself to the study of the Vedas. He must worship, in the morning and in the evening, the fire and the sun; then he must bow to his spiritual guide. He must always stand when his preceptor is standing, must move when the latter is moving, and while the latter is sitting must occupy a seat lower than the latter's. Whatever portion of the Vedas he is taught by his preceptor, he must listen to and recite with undivided mind. Every morning he must bring his preceptor fuel, water, or anything the latter requires. In short, a student of the Vedas is required to be a loyal, cheerful, and energetic worker in his preceptor's home—ever attending his duties, both domestic and religious.

### THIRD PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

#### GROUP A.

1. Translate into English two of the following extracts :—

30

(a) बोधिसत्त्वः किल कस्मिंश्चिन्महति ब्राह्मणकुले जन्मपरिगृह्य चकार । तस्य यत्र कनौयांसः षडपरे ध्यातास्तदनुसृज्य गृह्य बभूवुः सप्तमी च भगिनी । स कृतश्रमः सङ्गेषु सोपवेदेषु वेदेषु समधिगतविद्यायशाः संमतो जगति दैवतवन्मातापितरौ परया भक्त्या परिचरन्नाचार्यं इव पित्रेव तांश्चातुन् विद्यासु विनयग्रन्थविनयकुशलो गृहमावसति अ । स कालक्रमान्मातापितरौः कालक्रियया संविप्रहृदयः कृत्वा तयोः प्रेत-कृत्यानि व्यतीतेषु केषांचदेव दिवसेषु तांश्चातुन्संनिपात्योवाच ।

(b) एष लोकस्य नियतः शोकातिविरसः क्रमः ।

सह स्थित्वापि सुचिरं सत्युना यद्विद्योत्यते ॥

तत्प्रवृत्तिमुच्छिन्नामि श्रेयःप्राप्येन वत्सना ।

पुरा सत्युरिपुर्हन्ति गृहसंरक्तमेव माम् ॥

यतः सर्वानेव भवतः संबोधयामि । अश्वव ब्राह्मणकुले धर्मेण यथाधिगता विभव-मावा शक्यमनया वर्तितुम् । तत्सर्वेरेव भवतिः परस्परं खेदगौरवाभिमुखैर्वेदाध्ययन-परैर्मिमांसितस्त्रिजनप्रचयवत्सलैर्धर्मपरायणैर्भूत्वा सम्यग् गृहमध्यावस्यन् ।

(c) तदिदमव प्राप्तकालमिति विनिश्चित्य स राजा यश्चारभसमुत्सुक इव नाम तत्तेषां वचनं प्रतिगृह्णावोचदेनान् । सनाथः खल्वहमनुग्रहवाचं यदेवं मे हितावहित-

मनसोऽवभवन्तः । तदिच्छामि पुरुषमेधसङ्क्षेपे यष्टुम् । अन्विष्यतां तदुपयोग्यसंभार-  
समुदानयनार्थं यथाधिकारममात्यैः । परीत्यतां सन्नागरनिवेशनयोग्यो भूमिप्रदेशः ।  
अथैनं पुरोहित उवाच । ईप्सितार्थसिद्धये स्नातुं तावन्महाराज एकस्य यज्ञस्य समा-  
प्राप्तवद्भूये । अथोत्तरेशामारम्भः करिष्यते क्रमेण ।

2. (a) Expound the *samāsa* in five of the following :—

5

युवजानिः, षाष्ठातुरः, पीतोद्गीर्णम्, आतपशुष्कः, सुघ्रातः, अन्तर्गिरि and  
उदकुम्भः ।

(b) Use the alternative case-ending in four of the words under-  
lined :—

4

गवां कृष्णा बहुजोरा । मया सेव्यो हरिः । शतेन क्रीणाति । अचैर्दोष्यति ।  
कारयति भृत्येन कटम् । सोकेन मुक्तः ।

(c) Distinguish between any three of the following pairs :—

6

अपथम्, अपथः । कबरी, कवरा । सुष्ठत्, सुष्ठयः । राजकम्, राजन्यकम् ।  
तारका, तारिका ।

(d) Express by one word any three of the following :—

3

सायं भवः ; विटुषः ईषमृगः ; फलानि अस्य संजातानि ; धर्मादनपेतम् ; मदः  
विकारः ।

(e) Conjugate four of the following roots :—*द्विष्* in लङ् second person  
singular ; *शम्* in लट् third person plural ; *स्तु* in लोट् second person  
plural ; *शक्* in लिट् second person dual ; *वह्* in लिट् first person plural ;  
and *वस्* in लुङ् second person singular.

4

(f) Give the declined forms of the following :—*तुरासाद्* nominative  
and ablative singular ; *द्वहन्* and *सानु* locative singular ; *अदस्* (feminine)  
dative singular ; and *पाद* instrumental singular.

(g) Correct the errors in the following, giving reasons for the  
corrections made :—

10

- |                              |                              |
|------------------------------|------------------------------|
| (i) तैले सर्दिर्जानीते ।     | (ii) यो धर्मेः स सङ्गर्भतः । |
| (iii) न त्वां दृष्टाय मन्व । | (iv) रथेन संचरति यः ।        |
| (v) गोपी कृष्णाय तिष्ठति ।   | (vi) अधिगन्धगुरयं पुरुषः ।   |
| (vii) पंचांगुली हस्तः ।      |                              |

(h) Explain by examples the difference between a *Bahuvrihi*  
and a *Tatpurusha* compound.

4

### GROUP B.

(Attempt any THREE questions.)

1. Write all that you know of the works of two important poets  
preceding Kālidāsa.

10

2. Produce evidence to show whether Sanskrit drama can have  
any genitive connexion with that of Greece.

10

3. Give a brief idea of the doctrines of the Sāṅkhya system of  
philosophy and state in what way it is connected with or different  
from the Buddhistic doctrine.

10

4. Show that didactic fable was reflected in Indian literature even before the development of the text of the *Pañcatantra*. Write what you know about two of the early translations of the *Pañcatantra*. 10

5. Write short notes on any five of the following: *Ratnākara*, *Kṣemendra*, *Varāhamihira*, *Rājasekhara*, *Āryāsaptasatī*, *Navasāhasāṅkacarita*, *Somadeva* and *Kāmandaka*. 10

### BENGALI (SECOND LANGUAGE).

*Paper-Setters*— { RAI BAHADUR KHAGENDRANATH MITRA, M.A.  
DR. SUSILKUMAR DE, M.A., D.LIT.  
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### FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Write your answers in Bengali—you can write in EITHER but must not mix up the two styles.*

DRAMA TEXTS : 75 marks.

GRAMMAR AND RHETORIC : 25 marks.

1. Either, How far does the *Divyomāda* partake of the character of a symbolical, a lyrical and a human drama? Indicate the position of the work in Bengali *Vaiṣṇava* literature. 10

Or, Explain briefly the religious symbolism underlying the characters of *Kṛṣṇa* and *Rādhā* and their friends and associates.

2. Either, 'Girish Chandra's villains are the quintessence of villainy, unmitigated by a single redeeming feature. His characterization of these is thus to some extent morbid, and unnatural.' 15

Discuss the above statement with reference to *Praphulla*.

Or, Give a sketch of the character of *Jogesh*. How far was the tragedy of his life due to the machinations of *Ramesh*, to his own weakness, and to accidental happenings?

3. Give a brief critical estimate of the *Kṛṣṇa-Kumārī Nāṭak* as a drama, indicating what appear to you to be the strength and weakness of both plot and character-painting. 15

4. Explain seven of the following passages, giving full reference to the context :— 25

(i) সেই স্নেহের সাগর সখি শুকাইল,  
এখন আমার মেঘের পানে চাইতে হ'ল।

(ii) ও ত নয় তোর গিরিধর, চেয়ে দেখ ঐ বারিধর,  
মরি । হুটী নয়ন-ধারায় ধরা ভাসাস্ নে গো ধনি,—  
হের নবীন ধরাধর ॥

(iii) তখন আমি বলব গরব ক'রে,  
ব'লব আমাদের আমাদের আমাদের রাজার—  
খতের খাতক নিলাম ধ'রে ।

(iv) নলরাজ্য যে হংসকে দূত ক'রে পাঠিয়েছিলেন তার সোনার পাখা  
ছিল ; এ দাসের কি আছে মহারাজ ?

(v) সুবর্ণকাস্তি অগ্নির উত্তাপে আরও উজ্জল হয় ।

(vi) যে দীঘর প্রথমে ডুব দেয়, তাকেই কি সাগর উৎকৃষ্ট মুক্তাফল  
দিয়ে থাকেন ?

(vii) কেমন মিষ্টি মিষ্টি কথা ব'ললে, যেন ভাগবত প'ড়লে ।

(viii) 'লেট জট্টস্ টেক্ ইট্ কোর্স' । আমায় কিছু জিজ্ঞাসা ক'রো  
না, যা জান কর ।

(ix) যখন স্নানাম গেছে, সব গেছে ; আর কিসের টানাটানি ? আর  
যমতাই বা কিসের ?

(x) আপনাকে আমি যে দিন অবধি প্রদর্শন ক'রেছি, সেই দিন  
অবধি আপনার প্রতি মন আড়ষ্ট হ'য়েছে, আপনি অতি সজ্জন ও প্রকাণ্ড  
অস্ত্র ।

(xi) আমার সাজান বাগান শুকিয়ে গেল !

(a) Two passages from this Group—(i), (ii), (iii) :

(b) Two passages from this Group—(iv), (v), (vi) :

(c) Three passages from this Group—(vii), (viii), (ix), (x), (xi).

5. Answer one of the following questions :—

7

(a) Either, Briefly characterize the poetic diction of Kṛṣṇa  
Kamal Goswāmī.

Or, Compare and contrast the style of Kṛṣṇa-Kumārī with  
that of Praphulla.

(b) Write notes on seven of the following words and expres-  
sions :—

গৌরচন্দ্রিকা, মনোহরশাহী, বাকানন, ত্রিপতি, ভগবান, একলিঙ্গ,  
বাগ্মারাও, অপোগণ্ড, যবন, সগড়ি, ঠেয়ে, বা'ল, বয়াটে, ব্যাঘো-ভ্রামো,  
ঘারহ, কুলুজী, খাণ্ডারগী, আইবড়, আওহাল, প্যারী, কানাই, সিদ্ধেশ্বরী  
বাহা ।

6. Answer one of the following questions :—

124

(a) Discuss the tense-system of Bengali.

(b) Give some of the more important formative affixes of  
Bengali, with examples.

(c) Mention the more important types of *samāsa* in Bengali,  
quoting examples with non-Sanskrit words.

7. Explain five of the following terms, giving examples :—

121

অনুপ্রাস, যতি, রূপক, উৎপ্রেক্ষা, অতিশয়োক্তি, ব্যাঙ্গভূতি  
অপ্রযুক্ততাদোষ, শ্লেষ।

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

### FIRST HALF (POETRY TEXTS).

1. Explain with reference to the context any four of the following passages :—

28

- (a) আজু কে গো মুরলী বাজায়।  
এ তো কভু নহে শ্যাম রায় ॥  
ইহার গৌর বরণে করে আলো।  
চুড়াটি বান্ধিয়া কেবা দিল ॥  
তাহার ইন্দ্রনীল-কাস্তি-তনু।  
এ তো নহে নন্দমুখ কানু ॥  
ইহার রূপ দেখি নবীন আকৃতি।  
নটবর বেশ পাইল কতি ॥
- (b) যত নিবারিয়ে তার নিবার না যায় রে।  
আন পথে যাইতে সে কানু-পথে ধায় রে ॥  
এ ছার রসনা মোরে হইল কি বাম রে।  
যার নাম নাহি লই লয়ে তার নাম রে ॥  
এ ছার নাসিকা মুঞি যত করু বন্ধ।  
তবু ত দারুণ নাসা পায় শ্যামগন্ধ ॥  
সে না কথা না গুনিব করি অনুমান।  
পরসঙ্গ গুনিতে আপনি যায় কাণ ॥

- (c) সাধিতে আপন কাম                      আলাড়ু তোমার ধাম  
বহিবে আমার কিছু ভার।  
প্রাণের বহিনী গঙ্গে                      আস্তহ আমার সঙ্গে  
জাব রাজ্য কলিজ রাজার ॥  
সস্তাপ করহ মোর দূর।  
য়েই সে কলিজ দেসে                      হাজাহ উন্নত বেবে  
তবে বসে গুজরাট পুর।

- হই গো হরির দাসী                      হরিপদ হৈতে আসি  
সেই হরি গতি সভাকার ।  
কিবা আমি কৃষ্ণঅংশা                      কাহার না করি হিংসা  
কেনে রাজ্য হাজাব রাজার ॥
- (d) এই ব্যাধ নিচ জাতি                      তুমি রামা কুলবতী  
পরিচয় মাগে কালকেতু ।  
দেখি তোমা বড় ধন্য                      কিবা দ্বিজ-দেব-কন্যা  
ব্যাধের কুটিরে কিবা হেতু ॥  
সুন সুন জিজ্ঞাসি তোমারে ।  
ধেরূপ যৌবন তুমি                      তেজি নিজ বন্ধু স্বামী  
কি কারণে অক্ষটের ঘরে ॥  
অক্ষটি হিংসক রাড়                      চৌদিকে পত্তর হাড়  
য়েই ঘর শ্মশান সমান ।  
কহি আমি হিত বাণী                      য়েই ঘরে ঠাঁকুরাণী  
প্রবেশে উচিত হয় নান ॥
- (e) বাতে বাঁকা সর্ব্ব অঙ্গ পিঠে কুঁজ ভার ।  
অন্ন বিনা অন্নদার অস্থিচর্খসার ॥  
শত গাঁটি ছিঁড়া টেনা করি পরিধান ।  
বাসের নিকটে গিয়া হৈল অধিষ্ঠান ॥  
ফেনিয়া বুপড়ি লড়ি আশা অহঁ কয়ে ।  
জানু ধরি বসিলা বিরসমুখী হয়ে ॥  
ভূমে ঠেকে থুঁথি হাঁটু কান ঢেকে যায় ।  
কুঁজ-ভরে পিঠ ডাঁড়া ভূমিতে লুটায় ॥  
উকুনের কামড়েতে হইয়া আকুল ।  
চক্ষু মুদি হুই হাতে চুলকান চুল ॥
- (f) পুরীরাজে প্রণমিয়া কহে বারে বার ।  
বড় কৃপা করি কৈলা মো-ছারে উদ্ধার ॥  
পুরী কহে তব জানি না করিহ দৈন্ত ।  
জীব শিক্ষাইতে ধরায় হৈলা অবতীর্ণ ॥  
অতস্ত জৈব তুহঁ চিদানন্দময় ।  
তব মায়া-নাটে কার নাহি ভ্রম হয় ॥  
তুয়া গুণ প্রতিবিম্ব মন্ত্র-দরপণে ।  
দেখিয়া বিস্ময় হৈলা আপনার মনে ॥  
বৈছে শিশু নিজ বিষ দেখি ক্রৌড়া করে ।  
ভৈছে নিজ বিষ দেখি তব প্রেমাসুরে ॥

রাধা-অঙ্গ-কান্তো কৈলা অঙ্গ আচ্ছাদন ।

রাধা-ভাবে কর স্ব-মাধুর্য্য আশ্বাদন ॥

2. Explain the conception of love which finds expression in the passage (b) quoted above, illustrating your answer, when possible, with quotations from Chāṇḍīdās. 8

3. *Either*, Give your own estimate of Kālaketu's character especially with reference to his attitude towards Chāṇḍī when she appeared in his cottage in disguise. 6

*Or*, Give in your own words a description of the attempt of Vyāsadeva to found a second Kāśī and how it failed.

4 *Either*, Discuss the theory about Chaitanya's personality underlying the last two lines of the passage (f) above. 8

*Or*, Give an account of the meeting of Gaurāṅga and Advaita-chārya over the question of the superiority of knowledge (জ্ঞান) or devotion (ভক্তি)

### SECOND HALF (MODERN POETRY TEXTS).

1. Explain with reference to the context any four of the following :— 24

(a) নিজে যে ছঃখিনী পরছঃখ বুঝে সেই রে,  
কহিছ তোমারে ;  
আজিও পাখীর মন বুঝি আমি বিলক্ষণ  
আমিও বন্দীলো আজি ব্রজকারাগারে ।

সারিকা অধীরা ভাবি কুসুম-কানন ।  
রাধিকা অধীরা ভাবি রাধা বিনোদন ॥

(b) কে কবি—কবে কে মোরে ? ঘটকালি করি,  
শব্দে শব্দে বিয়া দেয় যেই জন,  
সেই কি সে যম-দমো ? তার শিরোপরি  
শোভে কি অক্ষয় শোভা যশের রতন ?  
সেই কবি মোর মতে, কল্পনামুন্দরী  
বার মনঃ-কমলেতে পাতেন আসন,  
অন্তগামি-ভানু-প্রভা সদৃশ বিতারি  
ভাবের সংসারে তার সুবর্ণ কিরণ ।

(c) রাজার উপরে রাজা, রাজ-রাজেশ্বর  
জেতার উপরে জেতা, জিতের সহায়  
আছেন উপরে বৎস, অতি ভয়ঙ্কর !  
দয়ালু অপকৃপাতী, মূর্তিমান্ তায় ।  
তাঁর রবি শশী তারা নক্ষত্রমণ্ডলে  
সমভাবে দেয় দীপ্তি ধনী ও নির্ধনে ;  
সমভাবে সর্বদেশে, খেতে ও শ্রামলে,  
বরষে তাঁহার মেঘ, বাঁচায় পবনে ।

- (d) চলেছে বৃধ-মণ্ডলী  
নরে করি' কুতূহলী,  
চন্দ্র সূর্য্য গ্রহ তারা  
ছি'ড়িয়া আনিছে তারা  
'শূন্য হ'তে ধরাতলে জ্ঞান ডোরে বাঁধিয়া।
- (e) আজ শত বর্ষ পরে  
এ সুন্দর অরণ্যের পল্লবের স্তরে  
কাঁপিবে না আমার পরাগ ? ঘরে ঘরে  
কতশত নরনারী চিরকাল ধ'রে  
পাতিবে সংসার খেলা, তাহাদের প্রেমে  
কিছু কি র'ব না আমি ? আসিব না নেমে  
তা'দের মুখের পরে হাসির মতন,  
তা'দের সর্কাজ মাখে সরস যৌবন,  
তা'দের বসন্ত দিনে অকস্মাৎ স্মৃথ  
তা'দের মনের কোণে নবীন উন্মুথ  
প্রেমের অঙ্কুররূপে ?
- (f) হে দেবর্ষি, দেবদূত, নিবেদিয়ো পিতামহ-পায়ে  
স্বর্গ হ'তে যাহা এল' স্বর্গে তাহা নিয়ো না ফিরায়ে।  
দেবতার স্তবগীতে দেবেরে মানব করি আনে,  
ভূষিব দেবতা করি' মাছুষেরে মোর ছন্দে গানে।

2. *Either, Is Palasir Yuddha an epic or a narrative poem? If not the former, why not?* 8  
*Or, Describe in your own language the conspiracy scene in the opening canto of Palasir Yuddha.*
3. *What constitutes, in your opinion, the excellence of Rabindra-nāth's lyrical poetry? Give illustrations, whenever possible.* 10
4. *Give a critical estimate of Michael M. S. Dutt's Brajangana Kāvya, as an expression of his lyrical genius.* 8

### THIRD PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Write your answers in Bengali, in either pure সাধু ভাষা or pure*

**চলিত ভাষা**

*The questions are of equal value.*

1. *Translate into Bengali one of the following passages, suiting your style as far as you can to that of the passage you select :—*

(a) *There are various kinds of greatness, as we all know; however, the most part of those who profess one species is ready to acknowledge no*



other. The first and chief is intellectual. But surely those also are to be admitted into the number of the eminently great, who move large masses by action, by throwing their own ardent minds into the midst of popular assemblies or conflicting armies, compelling, directing, and subjecting. This greatness is indeed far from so desirable as that which shines serenely from above, to be our hope, comfort and guidance; to lead us in spirit from a world of sad realities into one fresh from the poet's hand, and blooming with all the variety of his creation. Hence the most successful generals and the most powerful kings, will always be considered by the judicious and dispassionate as invested with less dignity, less extensive and enduring authority, than great philosophers and great poets.

(b) In jail and out of jail, in jail and out of jail, in jail and out of jail. There, you've got it. That's my life pretty much, down to such times as I got shipped off. I've been done everything to, pretty well—except hanged. I've been locked up, as much as a silver tea-kettle. I've been carted here and carted there, and put out of this town and put out of that town, and whipped, and worried and driven. I've no more notion where I was born than you have—if so much. I first became aware of myself down in Essex, a-thieving turnips for my living. Tramping, begging, thieving, working sometimes when I could—though that weren't as often as you may think, till you put the question whether you would ha' been over-ready to give me work yourselves—a bit of a poacher, a bit of a labourer, a bit of a hay-maker, a bit of a hawker, a bit of most things that don't pay and lead to trouble, I got to be a man.

2. Estimate the merits and demerits of the *Kādambarī* as a prose romance. How far do you think is the prose style adopted by Bāṇabhaṭṭa a suitable vehicle for his story? What is your opinion regarding the merits of Tārāsaṅkar's Bengali version which you read?

3. Either, Bāṅkimcandra's *Debi-Caudhurāṇī* has been characterized as 'a novel with a purpose.' Do you agree with this view? If so, how far, in your opinion, does the underlying 'purpose' affect the merits of the novel as a literary production?

Or, Write a critical appreciation of Bāṅkimcandra as a humorist and as a painter of life and character, basing your remarks chiefly on your reading of his *Debi-Caudhurāṇī*.

4. Either, Tek Cānd Thākur himself declares that his object in writing *Ālāler Gharer Dulāl* was to inculcate a certain moral, as well as to present a picture of contemporary manners. How far has he been successful in achieving these two objects, and how far have they contributed to making his work into a novel?

Or, Who is the 'hero' of *Ālāler Gharer Dulāl*, and why? Or is it a novel without a hero?

5. Either, “রামায়ণে দেবতা নিজেকে খর্ব্ব করিয়া মানুষ করেন নাই, মানুষই নিজগুণে দেবতা হইয়া উঠিয়াছেন।”

Illustrate this remark by referring briefly to the principal characters in the *Rāmāyaṇa*.

Or, Elucidate :—

বাল্মীকির রামচরিত্র কথাকে পাঠকগণ কেবলমাত্র কবির কাব্য বলিয়া দেখিবেন না, তাহাকে ভারতবর্ষের রামায়ণ বলিয়া জানিবেন। তাহা হইলে রামায়ণের দ্বারা ভারতবর্ষকে ও ভারতবর্ষের দ্বারা রামায়ণকে স্বার্থভাবে বুঝিতে পারিবেন।”

How far has this point been illustrated in the *Rāmāyaṇī-Kathā*?

6. Explain fully, with reference to the context, any four of the following passages:—

(a) উভয় কাব্যেই কবি দেখাইয়াছেন, মোহে যাহা অকৃতার্থ, মঙ্গলে তাহা পরিসমাপ্ত।

(b) টেম্পেটে শক্তি, শকুন্তলায় শাস্তি; টেম্পেটে বলের দ্বারা জয়, শকুন্তলায় মঙ্গলের দ্বারা সিদ্ধি; টেম্পেটে অর্দ্ধপথে ছেদ, শকুন্তলায় সম্পূর্ণতায় অবসান।

(c) আমরা আমাদের বিরহ-বিচ্ছিন্ন এই বর্তমান মর্ত্যালোক হইতে সেখানে কল্পনার মেঘদূত প্রেরণ করিয়াছি।

(d) ভরত স্বর্গের দেবতার তায়, তাঁহার ক্রিয়াকলাপ ঠিক যেন পৃথিবী-বাসীর নহে, উহা সর্বদা ভাবের এক উচ্চগ্রামে আমাদের মনোযোগ সবলে আকর্ষণ করিয়া রাখে। কিন্তু লক্ষণের আশ্চর্য্যাগ অতি সহজভাবে আসিয়াছে, উহা বায়ু ও জলের মত অতি সহজপ্রাপ্য।

(e) গীতায় যে নিকাম কর্ম্মের আদর্শ সংস্থাপিত হইয়াছে, হনুমান্ তাহারই জীবন্ত উদাহরণ।

(f) কলিকাতার আদি বৃত্তান্ত স্মরণ করিলে সকলেরই আশ্চর্য্য বোধ হইবে, ও সেই কলিকাতা যে এই কলিকাতা হইবে, ইহা কাহারও স্বপ্নে বোধ হয় নাই।

(g) আমি নূতন নহি, আমি পুরাতন। আমি সেই বাক্যমাত্র। কতবার আসিয়াছি, তোমরা আমায় ভুলিয়া গিয়াছ, তাই আবার আসিলাম।

### PALI

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## FIRST HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any three of the following stanzas commenting on the italicized words :— 15

(a) *Manopubbaṅgamā* dhanimā *manoseṭṭhā* *manomayā* !  
manasā ce paduṭṭhena bhāsati vā karoti vā !  
tato naṃ dukkham anveti cakkam va vahato padaṃ ||

(b) Aññā hi *lābhupaniṣā*, aññā nibbāna-gamini !  
evam etam abhinnaya bhikkhu Buddhassa sāvako !  
sakkāraṃ nābhinandeyya *vīcekam* anubrūhaye ||

(c) *Mataram pitaram* hantvā *rajanō dro* ca khattiye !  
*rattham sanucaram* hantva anigho yāti brahmano

(d) Na *vedaḡu dīṭṭhiyā* na *mutiyā*  
sa manam eti na hi tammayo so  
Na kammana no' pi *sutena* neyyo  
anupanito so nivesanesu

(e) Akittayī vivatacakkhu sakkhidhammam *parissayavinayam*  
patipadam vadehi bhaddam te *patimokkham* atha vapi samādhim

2. Compare the following Dhammapada verses in Pāli and Prākṛit, stating the reasons why you would prefer one text to the other :— 10

(a) (i) Pamādam anuyunjanti bālā dummedhino janā !  
appamādan ca medhāvi *dhanam seṭṭham* va rakkhati ||

(ii) Pramāda anuyu'ati bala drummedhino jana !  
apramada tu medhavi *dhana seṭṭhi* va rakkhati ||

(b) (i) Yān' imāni apatthāni *alāpun' ira sārade* !  
*kāpotakāni aṭṭhīni* tāni diṭṭvā kā rati ||

(ii) Yan imani avathani *alapun' ira sarade* !  
*saghararnani sisanī* tani diṭṭani ka rati ||  
Yan imani prabbhaguni *richitani disodisa*  
*kavotakani aṭṭhīni* tani diṭṭani ka rati

3. Explain the following stanzas in Pāli :— 10

(a) Kāsāvakaṇṭhā balayo pāpadhammā *asaññatā* !  
pāpā pāpehi kammebhi *nirayan* te upapajjare ||

(b) Ekam hi saccam na dutiyam atthi !  
yasmim pa'āno vivade pajānam ||  
Nānā te saccāni sayam thunanti !  
tasmā na ekam samaṇa vadanti ||

4. (a) Sekho dhammapadam sudesitam kusalo puppham iva-ppacessati ! 10

(b) Vitatanho anādāro niruttipadakovidō  
akkharānaṃ *sannipātaṃ* *jaṇṇā* pubbāperāpi ca !  
sa ve antimasārīro mahāpañño mahāpuriso' ti vuccati ||

(c) Sakam hi dhammam paripuṇṇam āhu  
aññassa dhammaṃ pana hīnaṃ āhu  
Evam hi viggayha vivādiyanti  
sakam sakam sammutam āhu saccam

Discuss the bearing of either the extract (a) on the Dhammapada as a literary compilation, or that of the extract (b) on the training of an arahat, or that of the extract (c) on the Buddhist idea of toleration.

5. Ascertain the antitheses of expositions of Buddhism in the Dhammapada and the Sutta-nipāta, and indicate how far these can enable you to determine the religious or cultural background of Buddhism. 10

6. Write explanatory or critical notes on any three of the following :—*duraṅgamaṃ ekaccaraṃ asariraṃ guhāsayaṃ cittaṃ; vāṇijo va bhayaṃ maggaṃ appasaṭṭho mahaddhano parivajjeyya; gahakārako diṭṭhoṣi puna gehaṃ na kāhasi; na cāhaṃ brāhmaṇaṃ brūmi yonijaṃ mallisambhavaṃ; udavindu yathāpi pokkhare padume vāri yathā na lippali evaṃ muni nōpalippati.* 15

7. Translate the following stanzas into idiomatic English :— 30

Kim gijjhā paridevasi, kā nu te paridevanā !  
 na me suto vā diṭṭho vā bhāsanto mānusiṃ diṇo ||  
 Bharāmi mātā-pitaro vaddhe giri-darisaye !  
 te kathan ne karissanti, ahaṃ vasaṃ gato tava ||  
 Yan nu gijjha yojana-saṭṭaṃ kuṇapāni avekkhati !  
 kasmā jālaṃ ca pāsaṃ ca āsajjāpi na bujjasi ||  
 Yadā parābhavo hoti poṣaṃ jivita-sankhaye !  
 atha jālaṃ ca pāsajjāpi na bujjhati ||  
 Bharassu mātā-pitaro vaddhe giri-darisaye !  
 mayā tvaṃ samanunhāto sotthiṃ passāhi nātake ||

## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate any three of the following passages into English, adding notes where necessary :— 15

(a) Kathaṃ bhante Nāgasena iminā cātummahābhūtikena kāyena Uttarakuruṃ va gaccheyya brahmalokaṃ vā aññaṃ vā paṇa cipaṇ ti.—Abhiñāsi nu tvaṃ mahārāja imissā paṭhaviyā vidatthiṃ vā rataṃ vā laṅghitvā ti.—Aha bhante abhiñāsi; ahaṃ bhante aṭṭha pi rataniyo laṅghāmi ti... Ahaṃ hi bhante, cittaṃ uppādeṃi : ettha nipatissāmi ti; saha cittuppadena kāyo me lahuṃ hoti ti.—Evaṃ eva kho mahārāja iddhimā bhikkhu cetovasippatto kāyaṃ citte samāropetvā cittavasena vebhāsaṃ gacchati ti.

(b) Dukkaraṃ mahārāja Bhagavatā kataṃ : imesaṃ arūpiṇaṃ citta-cetasikānaṃ dhammānaṃ ekārammaṇe vattamānānaṃ vavatthānaṃ akkhātaṃ .... Yathā mahārāja kocideva puriso nāvāya mahāsamuddaṃ ajjhogāhitvā hatthapuṭeṇa udakaṃ, gahetvā jivhāya sāyitvā—jāneyya nu kho mahārāja so puriso : idaṃ Gaṅgāyā udakaṃ, idaṃ Yamunāyā, idaṃ Aciravatiyā idaṃ Sarabhuyā, idaṃ Mahiyā udakaṃ ti.—Dukkaraṃ bhante jānitun ti—Aho dukkarataṃ kho mahārāja Bhagavatā katan ti.

(c) Thero sādhdūti sampatichchitvā dasa upāsakassa upāsaka-guṇe paridipesi : idha mahārāja upāsako saṅghena samānasukhadukkho hoti, dhammādhipateyyo hoti, yathābalaṃ samvibhāgarato hoti, Jinasāsana-parihāniṃ disvā abbivādhiyā vāyamaṇi, samuādiṭṭhiko hoti, apagatakoṭū, haḷamaṅgaliko jivitaḥetu pi na aññaṃ satthāraṃ uddisati, kāyikaṃ vācasikaṃ c' assa rakkhitaṃ hoti, samaggārāmo hoti samaggarato, anusuyyako hoti, na ca kulhanavasena sāsaṇe carati, Buddhaṃ saraṇaṃ gato hoti, dhammaṃ saraṇaṃ gato hoti, saṅghaṃ saraṇaṃ gato hoti.

(d) Yathā mahārāja kusalo bhāsako sallakatto vāṭapitta-semhasan-nipāta-utupaṇiṇā-visama-parihāra-opakkamikaṃ opakkantaṃ puti-kuṇapa-duggandhābhāsenaṃ antosallaṃ susiragataṃ pubba-mhira-sampuppaṇaṃ vāpaṃ vūpasamento vāpaṃ mukhaṃ kakkhaṇa-tikhiṇa-khāra-kaṭukena bhesajjēna anulūpatti paripaṇṇāyā, paripaccitvā mudubbhāvaṃ upagataṃ

satthēna vikantayitvā dahati salākāya, daḍḍhe khāralavaṇaṃ deti bhesaj-jenānulimpati vaṇarūhanāya byādhitaṣṣa sotthibhāvaṃ anupattiya, api nu kho so mahārāja bhisakko sallakatto ahitacitto *bhesajjenanulimpati*.

2. Explain any two of the following s'anzas in Pāli :— 10

- (a) Saddhāya tarati oghaṃ appamādena aṇṇavaṃ |  
viriyena dukkhaṃ acceti paññaya parisujjhati ||
- (b) Ayam patiṭṭhā dharanī 'va pāṇinaṃ |  
idaṃ ca mūlaṃ kusālābhivuddhiyā ||  
mukhaṃ c' idaṃ sabbajjīnāṃ sāsane |  
yo silakhandho varapātinuokkhiyo ||
- (c) Handa kathin paśadetvā chejjapessami meṇḍake |  
tassa niddiṭṭhamaggeva niddissantyanāgate ||

3. Sum up Nāgasena's reply to one of the following questions, adding your observations thereon :— 10

- (a) *Yam paṇ' etam brui : purimā koṭi na pannaṃyati ti, katamā ca sā purimā koṭi?*
- (b) *Yo uppajjati so cca so udāhu anno?*

4. Explain fully any three of the following :— 9

- (a) Apilāpanalakḥhaṇā sati upagaṇhanalakḥhaṇā ca.
- (b) Upatthambhanalakḥhaṇaṃ viriyaṃ.
- (c) Uhanalakḥhaṇo manasikāro chedanalakḥhaṇā pañña
- (d) Pamā khalakḥhaṇo sammāthi.
- (e) Patiṭṭhānalakḥhaṇaṃ sīlaṃ.

5. How does Nāgasena account for the inequality of men? What is his idea about the first beginning of time? 6

6. Either, Give a critical account of the stories of the Appamāda-vagga so as to bring out their importance in folk-literature, citing parallels wherever possible. 10

Or, Criticize fully the statement : "The work itself is styled Dhammapada Commentary, but the Commentary plays but a small part in comparison with the bulk of the illustrative tales."

7. Compare the language and style of Milinda-pañha with that of the Dhammapada Commentary, indicating the lines of departure from the language of the Canon. 10

8. Translate into idiomatic English :— 30

Evam eva k o Vāseṭṭha, na kira tevijjehi brāhmaṇehi Brahmā sak-khi-ditṭho, na pi kira tevijjānaṃ brāhmaṇānaṃ ācariyehi Brahmā sak-khi-ditṭho, na pi kira tevijjānaṃ brāhmaṇānaṃ ācariyapācariyehi Brahmā sak-khi-ditṭho, na pi kira tevijjānaṃ brāhmaṇānaṃ yāva satta-mācariyamahāyugehi Brahmā sak-khi-ditṭho. Ye pi kira tesam pubbakā isayo, mantānaṃ kattāro mantānaṃ pavattāro, yesaṃ idaṃ etarahi tevijjā brāhmaṇā porāṇaṃ mantapadaṃ gītaṃ pavuttaṃ samihitaṃ, tad anuga-yanti tad anubhāsanti, bhāsitaṃ anubhāsanti vācitaṃ anuvācenti—seyya-thidaṃ Atṭhako Vāmeko Vāmadevo Vesaṃmitto Yamataggi Aggirasso Bhāradvāja Vāseṭṭho Kassapo Bhagu—te pi na evam āhamsu : "Mayam etaṃ jānāma, mayam etaṃ passāma yattha vā Brahmā yena vā Brahmā yaṃ vā Brahmā ti". Te vata tevijjā brāhmaṇā e . m āhamsu :—"Yam na jānāma, yaṃ na passāma, tassa sahavyatāya maggaṃ desema : 'Ayam eva uju-maggo, ayaṃ añāsāyano niyyāniko niyyāti takkarassa Brahma-sahavyatāyā ti' ". Taṃ kiṃ maññasi Vāseṭṭha? Nanu evaṃ sante tevijjānaṃ brāhmaṇānaṃ appāṭihirakataṃ bhāsitaṃ sampajjati ti .... Te vata Vāseṭṭha tevijjā brāhmaṇā ye dhammā brāhmaṇa-karaṇā te dhamme pabāya vattamānā, ye dhammā abrahmana-karaṇā te dhamme samādāya vattamānā, avhāyana-hetu vā ācāyana-hetu vā patthana-hetu vā abhinandana-hetu vā kāyassa bhedaṃ param maraṇā Brahmaṇaṃ saba-vyūpagābhavissanti ti—n' etaṃ tñānaṃ vijjati.

## THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

## GROUP A. SANSKRIT GRAMMAR.

1. (a) Decline any *three* of the following :— 3
  - (i) आत्मन् in locative plural.
  - (ii) श्री in dative singular ;
  - (iii) हिष् in genitive plural :
  - (iv) अहन् in instrumental singular ;
  - (v) इदम् ( masculine ) in genitive dual.
- (b) Conjugate any *two* of the following roots :— 2
  - (i) व्रत in लट् first person singular ;
  - (ii) पा in लोट् second person singular.
  - (iii) ज्ञा in लङ् third person singular.
2. (a) Change the voice of any *two* of the following sentences :— 3
  - (i) बालकान् दृष्टवानहम् ।
  - (ii) दशं कुर्वन्ति साधवः ।
  - (iii) न कःपि हन्यते जन्तुः ।
- (b) Correct the errors in the following sentences :— 3
  - (i) छात्रा अध्ययने विरमन्ते ।
  - (ii) मातृवागत्या वन्तुगृहे अधिःसति ।
- (c) Illustrate the use of एकशेष and a causative verb. 4

## GROUP B. PALI GRAMMAR.

1. (a) Join by rules of *sandhi* any *three* of the following :— 3
  - (i) iti+assa ;
  - (ii) ajja+agge ;
  - (iii) ni+upadhi ;
  - (iv) ū+iritam ;
  - (v) yena+idha ;
- (b) Illustrate the uses of the third case-ending in Pāli. 4
2. (a) Expound the *samāsa* in any *two* of the following :—*tilokam*, *kālavāṇam*, and *bahukattuka*. 3
- (b) Give the *desideratives* of any *two* of the following roots :— *kit*, *dā*, and *sa*. 3
- (c) How are *gerunds* formed in Pāli? Give examples. 2

## GROUP C.

Translate into Pāli :—

30

What is the single doctrine? All beings persist through causes. All beings persist through conditions. This single doctrine, friends, has been perfectly set forth by the Exalted One who knows, who sees.

Hereon there should be a chanting in concord, not a wrangling, that thus this holy life may persist and be long maintained. That may be for the welfare and happiness of many folk, or compassion on the world, for the good, the welfare, the happiness of *devas* and of men.

### GROUP D.

Attempt THREE questions.

1. Write a clear note on the origin of Pāli. 14
2. "The inscriptional dialects agree with the Pāli sound system entirely." Illustrate. 13
3. Explain and illustrate :—*regressive assimilation, metathesis, syncope, and ablaut.* 13
4. Name the different kinds of Prākṛit. How do you show that the Prākṛits reach back to the Vedic language through the inscriptional dialects? 13
5. How are *e*, *ṛ*, *i*, and *au* represented in Pāli and Prākṛit? Give examples. 13

### FOURTH HONOURS PAPER

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Either, Give an account of the second Buddhist Council, pointing out the essential differences between the procedures of the first and second councils. 10  
Or, Write all that you know about the author of the *Mahāvamsa* and the sources from which he derived his information. How far are his historical statements reliable?
2. Either, Summarize the story of Moggaliputta Tissa's birth and his conversion to Buddhism. 10  
Or, Name and identify the places to which missionaries were sent by Moggaliputta Tissa for the propagation of Buddhism.
3. Write notes on any five of the following :—(a) *vibhajjavādin*, (b) *kathāvatthuppakaraṇa*, (c) *Buddhasāsanadāyāda*, (d) *pattidānava-cana*, (e) *kālāsoka*, (f) *iriyāpatha*, (g) *kammaṭṭhāna*. 10
4. Translate into English :— 10  
(a) *Iti paramamatinam pattipattabbakānam  
t' bhavaḥitakarānam lokanāthorassānam  
sumariya maraṇam tam sampkhatāsarakattam  
parigaṇiyam asesam appamatto bhaveyyāti.*  
(b) *Tasmim dine mahārājā sabbālamkārahāsito  
sahorodho sabhū-acco baloghaparivārito  
agamāsi sakārāmanam bhindanto viya medinim,  
samghamaḥjhamhi aṭṭhāsi vanditvā samgham uttamam.*
5. (a) Disjoin the *sandhis* in the following sentence :— 5  
*Athā khalu te kumārakā yena sa pitā tenopasaṃkrā-mannup-saṃkramya ivaṃ vadeyuḥ. Dehi nastāta tāni vividhāni kriḍanakāni raṃaṇiyāni.*  
(b) Parse the words italicized in the above sentence. 3

- (c) Decline the base of (i) *pitā* or *tena* (masculine), and (ii) *asmad* or *mahat* (masculine) in all cases and numbers. 6
- (d) Conjugate the root *kṛ* or *gam* in *lañ* (imperfect), and *as* or *muc* in *laṭ* (present). 6
6. Either, Name the suffixes used for forming comparatives and superlatives of adjectives in Sanskrit, giving examples. 4
- Or, Name the ten classes into which verbs are divided in Sanskrit grammar, giving examples :—
7. Translate into Sanskrit :— 6
- (a) The boy throws a stone.  
(b) Call your brother.  
(c) My father will buy a horse.
8. Translate into English any two of the following extracts :— 30
- (a) Sā devī samaye dhaññaṃ janayaṃ puttam uttamaṃ,  
mahārājikule tasmim ānando ca mahā ahu.  
Tassa puññānubhāvena tadābe va upāgamaṃ  
nānāratanasampuṇṇā satta nāvā tato tato  
Tasseva puññatejasa Chaddantakulato karī  
hatthicchāpaṃ āharitvā ṭhapetvā idha pakkami.
- (b) Porāṇehi kato p'eso ativithhārito kvaci,  
atīva kvaci sampkhitto, anekaponaṃuttako.  
Vajjitam tehi dosehi sukhaggahanaḍhāraṇam  
pasādasamvegakaraṃ sutito ca upāgataṃ  
pasādaḍhānake ṭhāne tathā samvegakaraṃ  
janayantaṃ pasādaṃ ca samvegam ca suṇātha tam.
- (c) Vaṅgesu Vaṅganagare Vaṅgarāṇā ahū pure  
Kālīggarāṇā dhitāsi mahesī tassa rājino.  
So rājā deviyā tassā ekamālabhi dhitaraṃ,  
nemitā vyākaraṃ tassā āvāhaṃ migarāḍhinā.  
Atīva rūpini āsi atīva kāmaggiddhini,  
devena deviyā cāpi lajjāyāsi jigucchitā.

### FIFTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

#### A. TEXT.

1. Translate any four of the following extracts, discussing the full significance of each :— 13

(a) Yāvakiyaṃ ca Ananda Vajjī apaññattam na paññāpessanti, paññattam na samucchindissanti, yathā paññatte porāṇe Vajjī-dhamme samādhaya vattissanti, vuḍḍhi yeva Vajjīnaṃ pāṭikaṅkhā, no parihāṇi.

(b) Na kho me bhante atitānāgata-paccuppannesu arahantesu sammā-sambuddhesu ceto-pariyaññaṃ atthi. Apī ca dhammanvayo vidito.

(c) Tena kho pana samayena Sunilha-Vasakārā Magadha-mahāmattā Pāṭaligāme nagaraṃ māpentī Vajjīnaṃ paṭibhāya; sambahulā devatāyo sahasasā eva Pāṭaligāme vatthūni parigaḍhanti.

(d) Tasmāt ih' Ananda attā-dīpā vibaratha attā-saraṇā anañña-saraṇā, dhamma dīpā dhamma-saraṇā anañña-saraṇā.



(e) Mā h' evaṃ Ānanda avaca : " Kuḍḍanagarakaṃ ujjāṅgala-nagara-kaṃ sākha-nagarakaṃ, santi hi bhante aṇṇāni mahā-nagarāni seyyathī-  
dapa Campā Rājagahaṃ Sāvattī Sāketaṃ Kosambi Pārāsi."

(f) Na kho Devānaṃpinda samaṇa-brāhmaṇā accanta-niṭṭhā accanta-yogakkhemī accanta-brahmacārī accanta-pariyosānā.

2. What is the difference between a *sutta* and a *mahāsuttanta*?  
What is the main theme of the *Mahāparinibbāna-Suttanta*, and does it justify the title? 4

3. What are the different interpretations of the word *sūkara-maddara*? Which of them is acceptable to you and why? 4

4. Fully discuss the significance of *dhammādāsa* and *mahāpadesā* indicating their bearings on Buddhism and its interpretation. 4

5. Explain one of the following two stanzas in Pāli:— 10

(a) Sabbe' va nikkipissaṇ' b' ūtā loke samussayam |  
yathā e'vaṃiso Sattā loke appaṭipuggala |  
Tathāgato balappatto sambuddho parinibbuto ||

(b) Yāda ca Buddhāṃ adakkhiṃ nicikucchā-vitāraṇam |  
so 'mhi vitabhayo ajāsaṃ Buddhāṃ pavaṇāsiya ||  
Taṇhā-sallassa hantāraṃ Buddheṃ appaṭipuggalaṃ |  
ahaṃ vande mahāviraṃ vandāmi' Adicca-bandhunaṃ ||

6. Either, Discuss the question whether any new literary art is developed in the *Sakkapañha-Suttanta* in presenting the riddles of Sakka. Give a critical analysis of these riddles and their solutions, deciding whether these bring out any new aspect of Buddhism. 10

Or, What light is thrown by the following extract on the date of composition of the *Mahāparinibbāna-Suttanta* and the political relation between Magadha and Vesālī?— 10

'Tena kho pana samayena rājā Māgadho Ajātasattu Vedehiputto Vajjī abhiyātu-kāmo hoti. So evaṃ āha : " Ahañhi 'me Vajjī evaṃ mahiddhike evaṃ mahānubhāve, ucchejāmi Vajjī vināse-sāmi Vajjī anaya-vyasaṇaṃ apādessāmi Vajjī " ti.

7. (a) Siyā kho pan' Ānanda tumbhākaṃ evaṃ assa : " Atīta-satthukaṃ pāvacaṇaṃ, n' atthi no satthā " ti. Na kho pan' etaṃ daṭṭhabbaṃ. Yo vo Ānanda mayā Dhammo ca Vinayo ca desito paññatto, so vo maṃ accayena Satthā

(b) Yathā kho pan' Ānanda etarahi bhikkhū aṇṇam aṇṇam āvuso-vādena samudācaranti, na vo maṃ accayena evaṃ samudācaritabbaṃ. Theratarena bhikkhuraṇā navakatare bhikkhu nāmena vā gottena vā āvuso-vādena vā samudācaritabbo, navakatarena bhikkhunā therataro bhikkhu " Bhante " ti vā " Āyasmā " ti vā samudācaritabbo.

(c) Ākaṅkhamāno Ānanda S m'ho maṃ accayena khuddānukhudda-kāni sikkhāpadāni samūhantu.

Either, Determine in the light of the above extracts (i) the position of the Buddha in relation to the Saṅgha, (ii) the relationship of the members of the Saṅgha before and after the demise of the Buddha, and (iii) the guiding principle of the Saṅgha. 6

Or, Show in the light of Buddhaghosa's account of the Councils how the injunction of the Buddha as embodied in the extract (c) formed a bone of contention and bore fruit far beyond the conception of the early followers of the Buddha. 6

## B. SANSKRIT GRAMMAR.

8. Give—

(a) 2nd and 3rd sing. imperf. parasm. of the following :—*han*, *vac*, *vaś*, and *duh*; 8

- (b) pres. parasm. of *brū*; 3rd pl. pres. parasm. of *bhī*; imperative 2nd sing. of *as* (to be), and *hu*; 2  
 (c) 2nd sing. perf. of *kṛ* (with *sam*), *caḥṣ*, and *arc*; 1½  
 (d) 3rd sing. aor. of *i* (with *adhi*), *as* (4th conj.), and *sū* 1  
 (with *pra*);  
 (e) 3rd sing. pres. frequentative of *dah*, *jan*, and *han*; 1½  
 (f) the Sanskrit equivalents of the following :—*eighty-second*, 1  
*a collection of four*, *how many times*, and *shortest*

9. Define बहुव्रीहि, and distinguish it clearly from तत्पुरुष. What is a अघोकरण-बहुव्रीहि? Give illustrations in support of your answer. 4

Translate any two of the following idiomatic sentences, clearly bringing out their meaning :— 4

- (a) प्रसन्नप्रायस्ते तर्कः ।  
 (b) आयुश्च एष वाग्विषयीभूतः स वीरः ।  
 (c) कथं प्रकाशतां गतीयमर्थः परेषु ।

10. Translate into Sanskrit any four of the following, observing the rules of Sandhi :— 12

- (a) I have purchased twenty-two sheep for forty-five rupees.  
 (b) He stayed at Benares for twelve years to study grammar.  
 (c) I had hardly left the house when he came to see me.  
 (d) There is no use crying over spilt milk  
 (e) If the boy had come when he was called, he would have got a prize.  
 (f) Brahmans repeating the vedas are like frogs croaking in the rains.

### C. UNSEEN.

11. Translate the subjoined extract into idiomatic English :— 30

'Jāti paccayā 'arā-maraṇaṃ' ti itī kho paṇ' etaṃ vuttaṃ. Tad Ānanda iminā p'etaṃ pariyāyena veditabbaṃ yathā jāti paccayā jara-maraṇaṃ. Jāti va hi Ānanda nābhavissa sabbena sabbam, sabbathā sabbam kassaci kimhici, seyyathidaṃ devānaṃ vā devattāya, gandhabhānaṃ vā gandhabbattāya, yakkhānaṃ vā yakkhattāya, bhūtānaṃ vā bhūtattāya, maṇussānaṃ vā maṇussattāya, catuppādānaṃ vā catuppadattāya, pakkhinaṃ vā pakkhattāya, sirimsapānaṃ vā sirimsapattāya, tesam tesam va hi Ānanda sattānaṃ tathattāya iāti nābhavissa, sabbasso jātiyā asati jāti-nirodhā api nu kho jarā-maraṇaṃ paññāyethā ti?

No h' etaṃ bhante.

### SIXTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions are of equal value.*

### GROUP A.

*Attempt FOUR questions only.*

1. Write an account of the Sākya, describing their mode of life and political institutions. What caused their downfall?



- (e) Phandamānaṃ pajam disvā macche appodake yathā |  
aññaṃ aññehi vyāruddhe disvā maṃ bhayam āvisi ||
2. Write explanatory or critical notes on any four of the following :— 10
- (a) bhovādi nāma so hoti;  
(b) mā lohagaḥaṃ gili;  
(c) dūre santo pakāseṃti Himavanto va pabbato;  
(d) vanaṃ chindatha, mā rukkhama;  
(e) gedhaṃ brūmi mahogho.  
(f) Athabbaṇaṃ supinaṃ lakkaṇaṃ.
3. Cite instances of archaism from the Dhammapada and the Aṭṭhakavagga verses. State, giving reasons, how far the prevalence of these can be relied upon as proof of the greater antiquity of the composition. 10
4. Either, What reasons can you adduce to prove that the Aṭṭhaka group of poems is one of the earliest known materials of the Buddhist canon? Why is it that just four of the poems of the Aṭṭhaka group bear the name of aṭṭhaka (octave) and consist strictly each of eight stanzas as an aṭṭhaka ought to? 10
- Or, What is the character of early Buddhism as determined by the gāthās of the Dhammapada and the Aṭṭhaka verses? Does the Dhammapada, when compared with the Aṭṭhaka poems, strike any new note of Buddhism, and what inference would you draw from both regarding the goal of Buddhism? 10
5. Explain the following stanzas, bringing out their main purport :—
- (a) Sabba-pāpassa akaraṇaṃ. kusalassa upasampadā |  
sacitta-pariyodapanaṃ, etaṃ Buddhāna sāsanaṃ ||
- (b) Sakāyaṃe cāpi dajhaṃ vadānā kaṃ etthaṃ bala' ti paraṃ dāheyya |  
sayam eva so medhakam āvaheyya paraṃ vadaṃ bālaṃ asuddha-dhammaṃ. ||
6. What are the known recensions of the Dhammapada? Why is the arrangement of the chapters not identical in them? How do you account for its wide popularity? 10
7. Translate the following stanzas into idiomatic English :— 30
- Ādittaṃ vata me sūtaṃ ghasitaṃ va pāvakaṃ |  
vārinā viya oṣiṇcaṃ sabbaṃ nibbāpaye deraṃ ||  
Abbahi vata me sallaṃ yaṃ āsi hūdaya-nissitaṃ |  
yo me soka-pareṭassa pitusokaṃ apānudi ||  
So' haṃ abbūhasallo' smi vītasoko anāvilo |  
na socāmi na rodāmi tava sutvāna mūnava ||  
Evaṃ karonti sappañña ye honti anukampakā |  
vinivattayanti sokambā sujāto pitaraṃ yathā ||

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate three of the following passages, of which (c) must be one, into English, adding explanatory notes on the words italicized :— 20
- (a) Atha kho Milinda rāja khaggapari-vārīto viya gaḥo, garuḷapari-vārīto viya nāgo, aḷagarapari-vārīto viya kothhuko...bhūtavajjasamāgato viya

pisāco, vaḷavanam anupaviṭṭho viya puriso *Vessavaṇāparādhiko* viya yakkho, bhīto ubbiggo utraṣṭo...bhantacitto vipariṇatamānaṃ mā maṃ ayaṃ jano paribhavi ti dhitim upaṭṭhapetvā *Devamantiyaṃ* etad avoca.

(b) Rājā āha : Kinattāhiyā bhante Nāgasena tumbākam pabbajjā ko ca tumbākam paramattho ti. Thero āha : *Kim ti mahārāja icam dukkham nirujjheyya aññañ ca dukkham na uppajjeyyā ti etodotthā mahārāja ambākam pabbajjā, anupādā parimabbānaṃ kho pana ambākam paramattho ti.*

(c) Yaṃ tattha mahārāja oḷārikam etaṃ rūpam, ye tattha sukkumā cīttacetasikā dhammā etaṃ nāman ti. Aññaṃaññūpanissitā mahārāja ete dhammā, ekato va uppajjanti ti. Yathā mahārāja kukkuṭiyā kalalāṃ na bhavēyya aḍḍam pi na bhavēyya, yañ ca tattha kalalāṃ yañ ca aḍḍam ubbo p' ete aññaṃaññūpanissitā, ekato va nesam uppatti hoti, evam eva kho mahārāja yadi tattha nāmaṃ na bhavēyya rūpam pi na bhavēyya, yañ c' eva tattha nāmaṃ yañ c' eva rūpam ubbo p' ete aññaṃaññūpanissitā, ekato va nesam uppatti hoti; evam etaṃ *digham addhānaṃ* sambhāvitaṃ ti.

(d) Thero āha : Kuhiṃ pana mahārāja iva jātabhūmi ti.—Attbi bhante Alasando nāma dīpo, tatthāham yāto ti.—Kiṃva duro mahārāja ito Alasando hoti ti —*Dumattāni* bhante yojanasatāni ti.—Abhiṇāsī nu tvam mahārāja tattha kiñcīdeva karaṇiyaṃ karitvā *saritā* ti.—Ama bhante, sarāṇi ti.—*Lahum* kho tvam mahārāja geato si dumattāni yojanasatāni ti.

2. Explain any two of the following stanzas in Pāli :—

10

(a) Pūjiantā asama-amā sadevamānusehi te |

na sadiyanti sakkāraṃ, buddhānaṃ esa dhammatā ||

(b) Paṭigace' eva taṃ kayirā yaṃ paññā hitam attano |

na sākaṭikacintāya mantā' dhiro parakkame ||

(c) Nābhinandāmi maraṇaṃ nābhinandāmi jīvitaṃ |

kālaṃ ca potikaṅkhamāmi nibbisam bhatako yathā ||

3. Answer in your own words any two of the following questions :—

10

(a) *Atthi keci sankhārā ye abharantā jāyanti ti?*

(b) *Vedagū upalabbhatī ti?*

(c) *Katīhi ākārehi satī uppajjati ti?*

4. Narrate the story either of Cūlapanthaka Thera or of Kumbhaghosaka, quoting and explaining the moral verse which it illustrates.

10

5. What are the data available in the Milinda-panha for the identity between Milinda and Menander?

10

6. Either, Comment upon Nāgasena's method of exposition, and characterize his position in regard to the fundamental principles of Buddhism.

10

Or, Illustrate the statement : " Like the Jātaka book, which it so much resembles, the work (i.e., the Dhammapada Commentary) is a perfect mine of curious information on ancient India."

7. Translate into idiomatic English :—

30

(a) Tasmiṃ pana nagare anusaṃvaccharaṃ vivāṇakkhattaṃ nāma hoti. tadā bahū anikkhamanakuḷāni pi parivārena saddhiṃ gehā nikkhamitvā apaṭicchannena sarirena padasā va naditaraṃ gacchanti. Tasmiṃ divase khattiyamahā-ālādinaṃ puttāpi attano samana-jātikaṃ manāpaṃ kuladdārikam disvā " māḷaguḷena parikkhipissāmā " ti taṃ tam maggaṃ nissāya tiṭṭhanti.

(b) So pi seṭṭhī dhītaṃ evaṃ ovadi : " amma sāsurakule vasantiyā nāma anto aggi bahi na nibharitabbo, bahi aggi anto na pavesetabbo, dadantassa' eva dātabbam, adadantassa na dātabbam, dadantassāpi adadantassāpi dātabbam, sukham nisīditabbam, sukham bhuñjitabbam, sukham nipajjitabbam, aggi paricaritabbo, anto devatāpi namassitabbā " ti idaṃ dasa-

vidham ovādam datvā, punadivare sabbā seniyo sannipādetvā rājasenāya majjhe aṭṭha kuṭumbike pātibhoge gahetvā, "sace me gataṭṭhāne dhītu doṣo uppajjati tumhehi sodhetabbo" ti vatvā navakoṭṭiagghaṇakena mahāla-tapasādhanaena dhitarap passādheta mahānacuppannūlakam catupannā-sakoṭṭidhanam datvā yānam āropetvā Sāketassa sāmāntā attano santakesu Anurādhapuramatteṣu cūḍa-ṣṣu bhattagāmesu āṇaṇi carāpesi : "mama dhitarā saddhim gantukāmā gacchantā" ti.

### THIRD PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

#### GROUP A.

1. (a) Join by *sandhi* any four of the following :—

सखि + इह, पाशान् + केतुम्. भा. + देवाः, वाक् + हि, विधुः + राजते ।

(b) Correct the errors in any four of the following, giving your reason in each case :—

- (i) कवीमो गच्छतः । (ii) देवाय नमस्कृत्य याति ।  
 (iii) देवपादानां सेवकस्य न प्रयोजनम् ।  
 (iv) यमं दक्षिणतः नदी । (v) पश्यन्ति सुगन्धम् ।  
 (vi) अमौ चक्षुषि कायः ।

(c) Decline three of the following bases :— अदस् (feminine) dative singular; चतुर् (masculine) accusative singular; गौ accusative plural; दिव् instrumental singular; अलि genitive dual

(d) Conjugate any four of the following roots :—जि perfect, third person singular; दा imperfect, second person singular; हन् present, third person plural; दृश् simple future, third person singular; कृ imperative, first person plural; and आप् imperative, second person singular.

2. (a) Name and expound the *samāsa* in four of the following :—*upagaṅgaṃ, bahunadikodeso, jānīpati, palchaṅkaro, saṃsārādukkhaṃ, and catuḍḍisaṃ.*

(b) Substitute single words for five of the following :—*Sakyaputtassa upaccaṃ putto; vinayaṃ adhīte; bhikkhūnaṃ samūho; pacchā jāto; sabbe ime pāpā, ayaṃ imesaṃ viscena pāpo; dāre niyutto, and sumedhā yassa hoti.*

(c) Conjugate three of the following roots in Pāli :—labh, imperative, second person singular; as, optative, first person plural; pra-vraj, aorist, third person singular; kru, aorist, third person plural; and tak, future conditional, third person singular.

(d) Derive and give the derivative meaning of any three of the following :—*pabbatāyati, jighacchati, titikkhati, and chattiyaṭi.*

3. Translate the following extract into Pāli :—

30

Having uttered her assent and traversed the whole length of the palace she assembled all the friends as well as the sons and daughters, saying, 'Your father wishes to give you an exhortation, this will be your last sight of him.' When the young prince Dhammapālakumāra heard this he began to weep, and went before his father surrounded by his younger brothers. When the father saw them, unable to maintain his tranquillity, he embraced them with eyes full of tears, and kissed their heads and pressed his eldest son for a moment to his heart. Then, raising him up from his bosom and going out of the royal chamber, he sat down in the middle of the couch on the raised platform and delivered his address to his thousand sons.

### GROUP B.

*Attempt any FOUR questions.*

- |   |    |
|---|----|
| 1. Define and illustrate :— <i>assimilation, prothesis, syncope, and analogy.</i>   | 10 |
| 2. Mention the chief characteristics of the principal languages or groups of languages in the Indo-Germanic family.                                     | 10 |
| 3. Compare the phonology of Avesta and Sanskrit, noting the agreement and disagreement of vowels in these languages in quality and quantity.            | 10 |
| 4. Produce evidence to show the existence of Prakrits side by side with the Vedic language. Did they in any way influence Vedic and Classical Sanskrit? | 10 |
| 5. Show by examples how civilization can be disclosed by a comparison of languages.   | 10 |
| 6. Compare the phonology of Pali and Sanskrit with regard to vowels.  | 10 |

### GROUP C.

*Alternative to Question 1, GROUP A. For Burman Candidates only.*

- |  |   |
|--|---|
| (a) Derive and give the derivative meanings of <i>five</i> only of the following :— <i>udadhi, sugato, kumbhakāro, dukkaraṇ, āgantuko, vādako</i> , and <i>upakāro</i> . | 5 |
| (b) Explain and illustrate the use of the dative in Pāli.  | 6 |
| (c) What are the different ways of indicating the gerund in Pāli? Give at least <i>one</i> example of each.  | 4 |

### ARABIC

- |                       |   |  |
|-----------------------|---|--|
| <b>Paper-Setters—</b> | { | MAULVI ABU TAHER.  |
| <b>(Pass and</b>      |   | PROF. M. Z. SIDDIQI.                                     |
| <b>Honours.)</b>      |   | MAULVI MD. IRFAN, M.A.                                   |
| <b>Examiners—</b>     | { | MR. A. H. HARLEY, M.A.                                   |
|                       |   | SHAMS-UL-ULAMA KAMALUDDIN AHMED, M.A.                    |
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| <b>(Honours.)</b>     |   | MAULVI MD. AMIN ABBASI.                                  |

## FIRST HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English, adding notes where necessary :— 15

(a) هون عليك الامرور اعلم \* ان لها مورداً و مصدر  
و اصبر اذا ما بليت يوماً \* فان ما قد سلمت اكثر  
يا يؤس للناس ما دهاهم \* صاروا و ما ينكرون منكر  
ارض المنايا لكل طاغ \* و ارض المنايا لمن تجبر  
يا رب ذي اعظم رفات \* لان اذا ما مشى تبخر  
فى الموت شغل لكل حي \* و ابي شغل لمن تفكر

(b) سقى الله بن منجبة سقاني \* بدر ما لراضه فطام  
فقد خفي الزمان به علينا \* كسلك الدر يخفيه النظام  
اذا عمد الكرام فتلك عجل \* كما الانواء حين تعدد عام  
قبيل انت انت و انت منهم \* وجدك بشر الملك الهام  
لقد حسنت بك الاوقات حتى \* كانك في فم الدهر ابتسام  
و اعطيت الذي لم يعط خلق \* عليك صلوة ربك و السلام

2. (a) Parse according to Arabic Grammar :—

9

and (i) يا يؤس للناس ما دهاهم ; (ii) و ابي شغل لمن تفكر

(iii) سقى الله بن منجبة سقاني - بدر ما لراضه فطام in the extracts in Question 1.

- (b) Explain the use of حرف ب in the different verses in the 3

extracts in Question 1 : (حسنت بك, خفي الزمان به, سقاني بدر)

- (c) Describe briefly the special features of the poems of the 10  
authors of the extracts in Question 1.

3. Explain fully, giving the context, if necessary :—

15

(a) و مجدي يدل بني خندف \* على ان كل كريم يماني  
طويل النجاد طويل العماد \* طويل القناة طويل اللسان  
حديد اللعاط حديد الحفاظ \* حديد العسام حديد اللسان



(b) و الحروب صاحبها الصليب على ثلاثها العزوم  
 من لا يملّ ضراسها و لدى الحقيقة لا يخيم  
 و اعلم بان الحرب لا يستطيعها المرح السؤم  
 و الخيل اجودها المنا هب عند كبته الازوم  
 (c) يا لهف نفسي على الشباب \* و لم افقد به ان فقدته امما  
 اذا اسحب الريط و المروط الى \* ادنى تجاري و انقض اللمما  
 لا تغبط اله رء ان يقال له \* امسى فلان لسنه حكما  
 ان سره طول عمره فلقد \* اضحى على الوجه طول ما سلما

4. (a) Name the author of the extract (b) in Question 3, and 8  
 describe briefly the contents of the whole poem.

(b) Write notes on the expressions underlined in extract (c) in 5  
 Question 3.

5. Describe briefly the special features of the poems selected from 10  
 the Kitāb-ul-Ḥamāsah and the Diwān of Al-Mutanabbi, in your  
 course, and explain them.

6. (a) Explain in Arabic :— 10

اعازل ما عمري و هل لي و قد اتت  
 اخا سفر سيري به و هو لا يدري  
 مقيمين في دار نروح و نغتدي  
 بلا اهبة الثاري المقيم و لا السفر

(b) Write grammatical notes on اعازل, ما عمري, and هل لي 7  
 in the above extracts.

7. Explain any six of the following :— 8

رديدك - اللهم - ليت شعري كيف حالك - ما ابعد الشئ  
 مرحبا - زجرت لهم طيرا - جر الدهر كلاكه على الناس - ملمة \*

## SECOND HONOURS PAPER

Candidates are required to give their answers in their own words  
 as far as practicable.

The figures in the margin indicate full marks.

1. (a) Translate into English :—

15

يَسْبَحُ لِلَّهِ مَا فِي السَّمَوَاتِ وَ مَا فِي الْأَرْضِ الْمَلِكِ الْقَدُّوسِ  
 الْعَزِيزِ الْحَكِيمِ \* هُوَ الَّذِي بَعَثَ فِي الْأُمَمِينَ رَسُولًا مِنْهُمْ يَتْلُوا

عَلَيْهِمْ آيَاتِهِ وَ يُزَكِّيهِمْ وَ يَعْلَمُهُمُ الْكِتَابَ وَ الْحِكْمَةَ وَ إِنْ كَانُوا مِنْ  
 قَبْلُ لَفِي ضَلَالٍ مُبِينٍ \* وَ آخَرِينَ مِنْهُمْ لَمَّا يَلْحَقُوا بِهِمْ وَ هُوَ الْعَزِيزُ  
 الْحَكِيمُ ذَلِكَ فَضْلُ اللَّهِ يُؤْتِيهِ مَنْ يَشَاءُ وَ اللَّهُ ذُو الْفَضْلِ الْعَظِيمِ \*  
 مَثَلُ الَّذِينَ حَمَلُوا التَّوْرَةَ ثُمَّ لَمْ يَحْمِلُوهَا كَمَثَلِ الْإِمَارِ يَحْمِلُ أَسْفَارًا \*  
 بِئْسَ مَثَلُ الْقَوْمِ الَّذِينَ كَذَبُوا بِآيَاتِ اللَّهِ \* وَ اللَّهُ لَا يَهْدِي الْقَوْمَ  
 الظَّالِمِينَ \* قُلْ يَا أَيُّهَا الَّذِينَ هَادُوا إِنْ زَعَمْتُمْ إِنْكُمْ أَوْلِيَاءُ لِلَّهِ مِنْ  
 دُونِ النَّاسِ فَتَمَنَّوْا الْمَوْتَ إِنْ كُنْتُمْ صَادِقِينَ \* وَ لَا يَتَمَنَّوْنَهُ أَبَدًا بِمَا  
 قَدَّمْتُمْ أَيْدِيَهُمْ وَ اللَّهُ عَلِيمٌ بِالظَّالِمِينَ \* قُلْ إِنْ الْمَوْتَ النَّبِيُّ  
 تَقْرُونَ مِنْهُ فَإِنَّهُ مَلَاقِيكُمْ ثُمَّ تُرَدُّونَ إِلَى عَالِمِ الْغَيْبِ وَ الشَّهَادَةِ  
 فَيُنَبِّئُكُمْ بِمَا كُنْتُمْ تَعْمَلُونَ \*

(b) Give all the meanings of the word : لَمَّا

5

(c) Give معنَى اعرابِ آخَرِينَ in the above extract :-

4

وَ آخَرِينَ مِنْهُمْ لَمَّا يَلْحَقُوا بِهِمْ

(d) Write a note on اسماء سته مكبره

5

(e) Explain افعال مدح و ذم with their عمل and illustrate with examples.

5

(f) Mention افعال القلب مع خصائصها

5

2. (a) Explain in Arabic :-

16

فلر قبل مبكاهها بكيت صباة  
 بسعدي شفيت النفس قبل التدم  
 و لكن بكت قبلي فهيم لي البكا  
 بكاهها فقلت الفضل للتقدم

و ارجر ان لا اكون في هذا الهذر الذي اردته - والمورد  
الذي تورده كالباحث عن حقه بظلفه و الجادع مارن انفه بكفه  
فالعق بالخسرين اعمالا الذين ضل سعيهم في الحيوۃ الدنيا و هم  
يعسبون انهم يحسنون صنعا \*

(b) Give vowel-points to the extract (a) in Question 2. 10

3. بينوا بالعربية تذكرة الحريرى صاحب المقامات و سبب  
وضعه المقامات \*

4. اذكروا بالعربية قصة خاتم رماء الرشيد فى الدجلة \* 10

5. Give a short account of سرنديب after قزوينى in his 10  
معجم البلدان .

### THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

22

(a) اعتزل ذكر الانغانى و الغزل  
و قل الفصل و جانب مَنْ هزل  
و دع الذكر لا يام الصبا  
فلا يام الصبا نجم افل  
و افكر فى منتهى حُسْن الذى  
انت تهواه تجد امرا جليل  
و اهجر الخمرة ان كنت فتى  
كيف يسعى فى جنون من عقل  
و اتق الله فتقوى الله ما  
جارت قلب امرئ الا وصل  
يا بُنى اسمع رمايا جمعت  
حكما خُصَّت بها خير الملل

اطلب العلم و لا تسئل فما  
ابعد الخير على اهل الكسل  
و احتفل للفقهاء في الدين و لا  
تشتغل عنه بمال و خول  
و اهجر النوم و حصله فمن  
يعرف المطروب يحقر ما بذل  
في ازدياد العلم ازغام العدا  
و جمال العلم اصلاح العمل

22 (b) الكتاب نعم الانيس في ساعة الوحدة - و نعم  
المعرفة في دار الغربية - و نعم القريين و الدخيل -  
و نعم الزائر و النزير - و عاء ملهى علما و ظرفا - افاء  
ملهى مزحا و جدا - هل سمعت بشجرة تؤتى اكلها كل  
حين بالسوان مختلفه و طعوم متباينة - هل سمعت  
بشجرة لا تذوي و لا تذبل و زهر لا يتوى و لا يهلك -  
و ثمر لا يفنى - و من لك بجليس يفيد الشئ و خلافه  
و الجفس و ضده - ينطق عن الموتى - و يترجم عن الاحياء -  
ان غضبت لم يغضب - يفيدك و لا يستفيد منك -  
و يزيدك و لا يستزيد منك - ان جد فعبرة و ان مزح  
فنزهة قبر الاسرار و مخزن الرذائع - قيد العلوم و بنبوع  
الحكم و معدن المكارم - و مونس لا ينام - يفيدك علم  
الاولين و يخبرك عن كثير من اخبار المتأخرين - هل  
سمعت في الاولين ان بلغك ان احدا من السالفين  
جمع هذه الاماني مع قلة مؤونته و خفة محمله لا يلتصك  
شيئا من دنياك - نعم العيب و نعم الظليل \*

2. Translate into English one of the following passages :—

(a) مسلمة بن عبد الملك كان يكنى ابا سعيد - و يلقب  
الجرادة الصفراء - الصفرة كانت تعلمه - و كان شجاعا باسلا -  
و فارسا بطلا - فتح في الروم فتوحا كثيرة بين بلاد و  
حصون و قلاع - منها حصن طوانة و حصن عمورية و اذاروليه  
و كثير غيرها يطول شرحه - و في سنة ٩٨ هجرى جهز  
سليمان بن عبد الملك جيشا و على راسه اخوه مسلمة  
لفتح القسطنطينية - فحبر الخليج و حاصر المدينة فلما  
اشتد على اهلها الحصار راسلوا مسلمة فى ان يعطوه  
عن كل راس دينار - فابى الا ان يفتحها عنوة - فقال  
عظماء الدولة لالون البطريق - ان صرفت عنا المسلمين  
ملكناك علينا - فلما استوثق منهم جاء الى مسلمة و  
استأمنه على نفسه و ذويه و وعده ان يفتح له المدينة  
اذا هو تنحى بعسكره قليلا ليطمئن اهل المدينة - ثم هو  
بعد ذلك حرفى ان يكر عليهم - فانخدع مسلمة و تنحى  
الى بعض الرسانيق - و دخل لاون فلبس التاج و اقتعد  
السرير و اعتزل الملك نارذ و سوس و لبس المسوح  
معتكفا فى كنيسة - و لما علم مسلمة بخديعة لاون كر  
راجعا بجيوشه و نزل بفناء القسطنطينية - و ظل محاصرا  
لها اشهر - و لقى جنده ما لم يلقيه جيش آخر حتى  
كان الرجل يخاف ان يخرج من العسكر وحده خوف  
اولئك الذين استجاش لاون من البلغار و الفرنج و  
الروم و غيرهم من الاخباس \*

(b) قُس بن ساعدة الايادى - هو خطيب العرب  
قاطبة - و المضروب به المثل فى البلاغة و الحكمة -  
كان يدين بالتحديد - و يرمي بالبعث - و يقال انه اول

من كل في خطبه (أما بعد) و أول اتكأ على سيف  
 أو عصاً في خطبته - و كان الناس يتحاکمون اليه - و  
 من خطبته خطبها في سوق عكاظ هي - ايها الناس اسمعوا  
 و عرا - من عاش مات - و من مات فات - و كل ما هو  
 آت آت - ليل داج و نهار ساج و سماء ذات ابراج - و  
 و نجوم تزهر - و بعار تزخر - و جبال مرساه و ارض  
 مدحاء - و انهار مجراه - ان في السماء لخبرا - و ان  
 في الارض لعبرا - ما بال الناس يذهبون و لا يرجعون  
 ارضوا فاقاموا - ام تركوا فناموا - يقسم قس بالله قسما  
 لا اثم فيه - ان لله دنيا هو ارضى لكم و افضل من  
 دينكم الذي انتم عليه - انكم لتاتون من الامر مفكرا -  
 و يروى ان قساً انشاء بعد ذلك يقول \*

في الناهبين الاولين من القرون لنا بصائرُ  
 لما رأيت موارد للموت ليس لها مصادر  
 و رأيت قومي نحوها تمضي الاكابر و الاصاغر  
 لا يرجع الماضي الى و لا من الباقيين غابر  
 ايقنت اني لا معالة حيث صار القوم صائر

3. Translate into Arabic :—

80

Mercy brings happiness to the man to whom it is shown. It comforts him and soothes him in his distress. It soothes hunger, clothes nakedness, allays pain and gives strength to the drooping spirits. It brings hope and cheer and life to suffering humanity. And it does not do less good to him who bestows it on others. It is a divine attribute. God Himself is love or mercy. The more we develop this quality, the closer becomes our communion with God and the purer is the bliss that exalts the soul.

## FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. 'Poetry is a criticism of life.'

18

Discuss the merit of the Mu'allagāt you have read, in the light of the above statement.

2. Translate into English any three of the following, adding necessary notes :—

15

(a) لا رب خصم فيك الربى رددته

نصيم علي تعذاله غير موئل  
و ليل كموج البحر ارخى سدوله  
على بانواع الهموم ليبتلي  
فقلت لها لما تمطى بصلبه

و اردف اعجازا ر ناء بكل كل  
الا ايها الليل الطويل الا انجلي

بصم و ما الاصباح فيك بامثل  
بل انت لا تدريين كم من ليلة

طلق لذيد لهوها ر ندامها  
قد بت سامرها ر غاية تاجر

وافيت ان رفعت و عز مدامها  
اغلى السباء بكل ادكن عاتق

او جنة قدحت ر فض ختامها  
و صبر صافية و جذب كرينة

بموت ر تاتاله ابهامها  
بادرت حاجتها الدجاج بسعرة

لاعل منها حين هب نيامها  
و لقد شربت من الدامة بعد ما

(c) ركند الهواجر بالمشوف المعلم

بـزجاجة صفراء ذات اسرة  
قرنت باظهر فى الشمال مقدم  
فاذا شربت فانني مستهلك  
مالى ر عرضى وافر لم يكلم  
و اذا صحت فلا اقصر عن ندى  
و كما علمت شمالي و تكرمي  
لقد اقسم مقاما لو يقرم به (d)  
ارى ر اسمع ما لو يسمع الفيل  
لظل يرمد الا ان يكون له  
من الرسول باذن الله تنويل  
حتى وضعت يميني لا انازع  
في كف ذي تقمات قيله القيل  
لذلك اهيب عندي اذا كلمه  
و قيل انك منسرب و مسبول  
من خادر من ليوث الاسد مسكته  
من بطن عثر غيل دونه غيل

2. Name the author of the extract (d) in Question 2, and describe the incident to which it refers. 10

3. Explain with reference to the context :— 12

(a) ر جلا السيول عن الطلول كانها  
زبر تجد متونها اقلامها  
او رجع واشمة اسف نوورها  
كففا تعرض فرقهن رشامها  
يدعون علتى ر الرماح كانها (b)  
اشطان بئر في لبان الادهم  
ما زلت ارميهم بثغرة نعره  
و لبانه حتى تسربل بالدم



(c) تجاوزت احراسا اليها و معشرا  
علي حراسا لو يصرون مقتلي  
اذا ما الثريا في السماء تعرضت

تعرض اثناء الرشاح المفضل

4. *Either*, 'The poetry of Ibnu'l-Fāriḍ is thoroughly Arabian both in spirit and form.' Discuss fully. 15

Or, Give a short sketch of the life of Ibnu'l-Fāriḍ.

5. Explain in Arabic, with reference to the context :— 15

(a) فهمهم - صدوا دنوا - وصلوا جفوا  
ندروا وفوا - هجروا رثوا لضائبي

و هم عياني حيث لم تغن الرقي  
و هم ملاذي في الهوى و رضائي  
(b) آها آيامنا بالخفيف لو بقيت

عشرا و واها عليها كيف لم تدم  
هيئات را اسفى لو كان ينفعنى  
او كان يعدي على ما فات را ندمي  
(c) يقرلون لي صفها فانت بوصفها

خبير - اجل عندي بارصافها علم  
صفاء و لا ماء و لطف و لا هوا  
و نور و لا نار و روح و لا جسم

6. Explain any six of the following :— 9

وجد - شوق - هيهات - جوف العير - خذروف الوليد -  
خافية الغراب - الرمح الاصم - الوشاة - شم العرائين - الليلة الليلية

7. Give the context and translate into English :— 6

لعل اصيحابي بمكة يبردوا  
بذكر سليمى ما تبجن الاضالع  
و عل الليليات التي قد تصرمت  
تعرد لنا يوما فيظفر طامع  
و يفرح معززون و يحيى متيم  
و بانس مشتاق و يلتذ سامع

## FIFTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. (a) Translate into English :—

15

و قفوههم انهم مسئولون ما لكم لا تناصرون بل هم اليوم  
مستسلمون و اقبل بعضهم على بعض يتساءلون قالوا انكم كنتم  
تاتوننا عن اليمين قالوا بل لم تكونوا مؤمنين و ما كان لنا  
عليكم من سلطان بل كنتم قوماً طاغين فحق علينا قول ربنا  
انا لذائقون فاغويناكم انا كنا غارين فانهم يرمئذ في العذاب  
مشكوكون انا كذلك نفعل بالمجرمين انهم كانوا اذا قيل لهم  
لا اله الا الله يستكبرون و يقولون ائنا لتاركوا الهتنا لشاعر  
مجنون بل جاء بالحق و صدق المرسلون انكم لذائقوا العذاب  
الاليم الا عباد الله المخلصين \*

(b) Give root, باب, صيغة and تعليل of قفوا. 3

(c) Why is الف dropped from the end of قفوا in قفوههم 2

(d) Give the root, باب and خاصة of مستسلمون و تناصرون 3

(e) Why is تاركوا الهتنا and ذائقوا العذاب dropped in تاركوا الهتنا 2

(f) Is عباد الله in the above extract taken as مستثنى متصل or منقطع ? Explain fully. 10

2. (a) Explain, in Arabic, with شان نزول after زمخشري 18

أَيَحْسَبُ الْإِنْسَانُ أَلَّنْ نَجْمَعَ عِظَامَهُ بَلَىٰ قَادِرِينَ عَلَىٰ أَنْ نُسَبِّحَ  
بَنَاتِهِ

(b) What is the original form of أَلَّنْ 2

(c) Give the difference between بَلَىٰ and نَعَمْ 3

(d) Give the محل الاعراب of قَادِرِينَ in Question 2 (a). 6

3. Relate the history of الأخدود 9

4. Give the idea of الرويا and الحكاية about ابن خلدون 9

5. Explain, in English, with reference :—

9

الا من يشتري سهرا بنوم \* سعيد من يبيت قرير عين  
فلما حمير غدرت ر خانت \* فمعدرة الا له لندي رعين

6. Translate into Arabic :—

20

I found myself in a country that was quite new to me and dared not return to the main road lest I should again fall into the hands of the robbers. Luckily my wound was only a slight one, and after binding it up as well as I could, I walked on for the rest of the day, till I reached a cave at the foot of a mountain, where I passed the night in peace, making my supper of some fruits I had gathered on the way.

### SIXTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

#### A. MUSLIM HISTORY.

*Answer THREE questions only.*

1. Give a brief account of the achievements of 'Umar the First. 10
2. Mention the memorable actions of Al Ma'mūn. 10
3. Sketch the literary progress of the Muslims under the Khalifa Al-Hārūn. 10
4. State why the battle of Tours is reckoned among the fifteen decisive battles of the world? 10

#### B. HISTORY OF ARABIC LITERATURE.

*Answer any FOUR questions.*

1. Give a brief account of the pre-Islamic poetry of the Arabs. 10
2. State the influence of the Qur'ān on the development of Arabic literature. 10
3. Compare the style of the following three books, viz., *Kalīlah and Dimnah*, the *Hamāsah* and the *Dīwān* of Mutanabbī. 10
4. Give an account of the life of كعب بن زهير and his poetry. 10
5. Write notes on any three of the following :— 10

ابن سينا \* (a)

جار الله زمخشري \* (b)

الفرزدق \* (c)

جلال الدين السيوطي \* (d)

## C. RHETORIC AND PROSODY.

*Answer any THREE questions.*

1. بيّنوا انواع العلاقة فى المجاز المرسل بالتصريح و التمثيل 10
2. ميزوا بين الحقيقة و المجاز بالتصريح 10
3. اذكروا الاستعارة بالكناية والاستعارة التخيلية بالتمثيل 10
4. اشرحوا بالاختصار : — 10

تجريد - ترشيم - تشبيه \*

5. Scan the following, and specify the metre :— 10

نقد اتمت رسول الله معذرا  
و العذر عند كم ام الناس مقبول

## ARABIC

*Examiners—* { KHAN BAHADUR MD. HASSAN.  
MAULVI A. F. M. ABDUL KADIR, M.A.  
KHAN BAHADUR ABDULLAH ABU SAYEED, M.A.

## FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

13

(a)

اشد الجهاد جهاد الهوى \* و ما كرم المرء الا التقى  
و اخلاق ذي الفضل معروفة \* ببذل الجميل و كف الذى  
و كل الفكاهات مملولة \* و طول التعاشر فيه القلى  
و كل طريف له لذة \* و كل تلبد سريع البلى  
و لا شئ الا له آفة \* و لا شئ الا له منتهى

(b)

يكى شجرة الاسلام من علمائه \* فما اكثرثوا مما رآ من بكائه  
فاكثرهم مستقيم لصواب من \* يخالفه مستحسن لخطائه  
فايهم المرجو فينا لدينه \* و ايهم الموثوق فينا برأيه

(c)

الا رب ذي اجل قد حضر \* كثير التمني قليل الحذر  
 اذا هز في المشى اعطافه \* تعرفت في متكبيه البطر  
 يؤمل اكثر من عمرة \* ويزداد يوما بيوم اشر  
 ويمسي و يصبح في نفسه \* كريم المساعي عظيم الخطر  
 يرش و يبري و في يومه \* له شغل شاغل لو شعر  
 يعد الغرور و يبني القصور \* و ينسى الفناء و ينسى القدر  
 و ينسى القرون و ريب المنون \* و ينسى الخطوب و ينسى العبر  
 يجرعه العرص كاس العمى \* و يحمله فوق ظهر الغر

2. Write notes on ten of the underlined expressions in the extracts in Question 1. 15

3. Describe the character of Abū'l-Atāhiya as it is revealed in his poems. 10

4. Explain in simple Arabic :— 10

اياك و الامر الذي ان ترسعت  
 موارد ضاقت عليك المصادر  
 فما حسن ان يعذر المرء نفسه  
 و ليس له من سائر الناس عاذر

5. Translate into English :—

18

(a)

ان الامور اذا انسدت مسالكها  
 فالصبر يرتق كل ما ارتجما  
 لا تياسن و ان طالت مطالبة  
 اذا استعنت بصبر ان ترى فرجا  
 قدر لرجلك قبل الخطر موضعها  
 فمن علا زلعا من غرة زلجا  
 و لا يغرنك صفوانت شاربها  
 فربما كن بالتقدير تمزجا

(b)

و لست بذني وجهين فيمن عرفته  
 و لا البخل فاعلم من سمائي و لا ارضي  
 و انني لسهل ما تغير شيمتي  
 صروف الليالي الدهر بالقتل و النقص  
 اكف الاذى عن اسرتي و اذوده  
 على انني اجزى المقارض بالفرض  
 و امضي همومي بالزماح لاهلها  
 اذا ما الهموم لم يكد بعضها يمضي

(c)

الم تعلمي اني اذا النفس اشرفت  
 على طمع لم انس ان اتكرما  
 و لست بلوام على الامر بعدما  
 يفوت و لكن على ان اتقدما

6. Render into simple Arabic :—

14

(a)

أُنْبِئْتُ و الايام ذات تجارب  
 و تبدي لك الايام ما لست تعلم  
 بان شراء المال ينفع ربه  
 و يثني عليه الحمد و هو مذموم  
 و ان قليل المال للمرء مفسد  
 يحز كما حز القطيع المحصر  
 يرى درجات المجد لا يستطيعها  
 و يقعد وسط القوم لا يتكلم

(b)

و ما انا بالساعي بفضل زمامها  
 لتشرب ماء العرض قبل الركائب  
 و ما انا بالطاري حقيبة رحلها  
 لابعثها خفا و اترك صاحبي

إذا كنت ربا للقلوص فلا تدع  
 رفيقك يمشي خلفها غير راکب  
انصها فاردفه فان حملتكما  
فذاك و ان كان العقاب نعاقب

7. Write notes on any ten of the underlined expressions in the above extracts. 15

## SECOND PASS PAPER

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English any two of the following :—

22

A.

( رَاتَيْنَا مُوسَى الْكِتَابَ ) التوراة ( رَجَعْنَاهُ هَدًى لِّبَنِي إِسْرَآئِيلَ )  
 أَن لَّا يَتَّخِذُوا مِن دُونِي وَكِيلًا ( يفوضون اليه امرهم و في قراءة تتخذوا بالفوقانية التفاتاً فان زائدة و القمل مضمر يا ذُرِّيَّةَ مَنْ حَمَلْنَا مَعَ نُوحٍ ) في السفينة ( أَنَّهُ كَانَ عَبْدًا شَكُورًا )  
 كثير الشكر لنا حامداً في جميع احواله ( وَقَضَيْنَا ) اوحينا ( إِلَى بَنِي إِسْرَآئِيلَ لَتَفْسِدُنَّ فِي الْأَرْضِ ) ارض الشام بالمعاصي ( مَرْتِينَ وَ لَتَعْلُنَّ عُلُوقَ كَبِيرًا \* )

B.

حدث العارث بن همام قال انست من قلبى القساسة حين  
 حللت ساوة - و اخذت بالخير الماثور - في مداواتها بزيارة  
 القبور - فلما صرت الى محلة اموات - و كفات السرفات - رايت  
 جمعاً على قبر يعفر - و مجنوز يقبر - فأتعزت اليهم متفكراً  
 فى المآل - متذاكراً من درج من الآل - فلما العدوا الميت وفات

قول لهي - اشرف شيخ من رباوة - مختصرا بهرارة - و قد لفح  
وجهه بردائه - و نكر شخصه لدهائه - فقال لمثل هذا فليعمل العالمون.  
فاذكروا ايها الغافلون - وشمروا ايها المقصرون و احسنوا النظر ايها  
المتبصرون - ما لكم لا يحزنكم دفن الاتراب - و لا يهولكم هيل التراب -  
و لا تعسأرون بنوازل الحداث - و لا تستعدرون لنزول الجداث - و لا  
تستعبرون لعين تدمع - و لا تعتبرون بنعي يسمع - و لا ترتاعون  
لالف يفقد - و لا تلتاعون لمناحة تعقد - يشيع احدكم نعش الميت -  
و قلبه تلقاء البيت \*

C.

و بقي القصر خرابا لا يجسر احد دخوله لانه ظهر فيه شجاع عظيم  
و كان يسمع من داخله انيس كانيس المرضى و قد اخبر الله تعالى  
عنهم و امثالهم بقوله فكاي من قرية اهلكناها و هي ظالمة فهي  
خاوية على عروشها و بئر معطلة و قصر مشيد - و البئر المعطلة  
كانت بعدن سنذكرها ان شاء الله تعالى - و بها قبر هود النبي  
عليه السلام قال كعب الحبار كنت في مسجد رسول الله صلعم  
في خلافة عثمان رضى فاذا برجل قد رمقه الناس لطوله - فقال  
ايكم ابن عم محمد - قالوا اى ابن عمه - قال ذلك آمن به  
صغيرا - فارموا الى على بن ابي طالب رضى فقال على ممن  
الرجل - فقال من اليمن من بلاد حضرموت فقال علي اتعرف  
موضع الاراك و السدرة الحمراء التى يقطر من اوراقها ماء في  
حمرة الدم فقال الرجل كانك سألتني من قبر هود عم - فقال على عنه  
سألتك فعدتني \*

2. (a) Give the root **باب** and **تبدیل** of the word **ادكروا**. 4
- (b) Give the **صیغه** and **تعلیل** of **لَتَعْلُنَّ**. 3
- (c) Give the **صیغه** of **شكر** with examples of the same. 2
- (d) State when **منادی** becomes **منصوب**. 2
- (e) Explain **كان ناقصه** and **كان تامه** with examples. -



(f) Although the word **نُوح** contains two causes of **منع صرف** why is it still **منصرف**? 3

(g) Explain the term **التفات**. 3

3. (a) Explain :— 16

الحمد لله الولي الحميد - المبدئي المعيد - البعيد في  
قربه من العبيد - القريب في بعده فهو اقرب من حبل الوريد  
معني ربيع العارفين بتحيات حياة التوحيد - ر مغني نفوس  
الزاهدين بكنوز احتقار الافتقار الى العرض الزهيد - و مخلص  
خواطر المعقنين من سجون دجون التقليد الى فسم التجريد -  
نعمده و له الحمد المنتظمة درره في سلوك و سموط التابيد -  
حمد من نزه احكام واحدانيته و اعلام فردانيته عن مرابط التفبيد -  
و مخاطب الطبع البليد \*

(b) Give the singulars of **سموط** and **سلوك**. 3

4. Give a short account of the life of **عمر بن عبد العزيز** and mention in which point of faith he differs from other Umayyad caliphs. 14

5. (a) Explain :— 14

تباً لطالب الدنيا لا بقاء لها  
كانما هي في تصريفها حلم  
صفاءها كدر سراءها ضرر  
امانها غدر انوارها ظلم  
شبابها هرم راحتها سقم  
لذاتها ندم وجدانها عدم  
فخل عنها و تركن لزهرتها  
فانها نعم في طيها نقم

(b) Give the singular of **نعم** and mention what kind of plural it is. Illustrate with examples. 3

6. Relate the story of **الملك كريم** referring to the following lines :—

اهدت لك العنبر في جوفه  
زر من التبر خفي اللحم  
فالزر و العنبر معناهما  
زر هكذا مختفيا في الظلم

## THIRD PASS PAPER

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

(a) 25 لك الحمد و النعماء و الملك ربنا

فلا شئ اعلى منك مجدا و امجد

ملك على عرش السماء مهيم

لعزته تعزوا لرجوه و تسجد

فسبحان من لا يعرف الخلق قدره

و من هو فوق العرش فرد مرحد

هو الله بارى الخلق و الخلق كلهم

اماء له طوعا جميعا و اعبد

ملك السموات الشداد و ارضها

يدوم و يبقى و الخليفة تنفذ

(b) 25 كتب عمر بن عبد العزيز رضي الله عنه لما رلى

الخليفة الى الحسن بن ابي الحسن البصرى ان يكتب اليه بصفة

الامام العادل فكتبت اليه الحسن - اعلم يا امير المؤمنين ان الله

جعل الامام العادل صلاح كل فاسد - قوة كل ضعيف - و نصفه كل

مظلوم - و الامام العادل يا امير المؤمنين كالراعى الشفيق على

ابله - الرفيق الذي يطلب لها اطيب المرعى - و يزودها عن

مراقع المهكة - يحفظها من السباع - و يكنفها من اذى الحر

و البرد - و الامام العادل يا امير المؤمنين كالب الشفق على

ولده - يسعى لهم مغارا - و يعلمهم كبارا - و يكتسب لهم في

حياته - و يدخر لهم بعد مماته - و الامام العادل يا امير المؤمنين

كالأم الشفيقة بولدها - حملته كرها - و رضعته كرها - و رتبته طفلا -

تسكن بسكونه ترضعه تارة و تطفئه اخرى و تفرح بعافيته

و تغتهم بشكايتته \*

2. Translate into English any one of the following extracts :—

28

A.

جلال الدين سيوطي

هو عبد الرحمن جلال الدين بن الامام كمال الدين  
السيوطي - العالم المحدث الفسر صاحب التصانيف المشهورة -  
ولد سنة ٨٤٩ هجرى - و نشأ يتيما وحفظ القرآن وعمره دون  
ثمان - ثم حفظ كتب الفقه والنحو - و اخذ العلم من مشايخ  
وفته - و ابتدأ فى التصنيف سنة ١٧ سنة - ثم لزم  
الاشياخ و طلب العلم في بقاع الارض - فدخل الشام و الحجاز  
و اليمن و هند و نبغ في كثير من العلوم - و تولى التدريس  
و الافتاء - و لم يكن احد اشهر منه في زمنه - و بعد السيوطي  
من الائمة الذين حفظوا العلم للخلف - و سهلوا سبيله  
للمتأخرين و قد ترك للناس اكثر من ثلثمائة مصنف - و توفى  
سنة ٩١١ هجرى بالقاهرة \*

B.

قال المامون - ان العلم لا يدرك غوره - و لا يسبر قعره -  
و لا تبلغ غايته - و لا يعد اقسامه - و لا يضبط اخره - فاذا كان  
 الامر كذلك فابدأوا بالفرض قبل النقل - فاذا فعلتم ذلك كن  
عدلا و قولا صدقا - و قد قال بعض العلماء - خذ من اقسام العلم  
 ما هو اشبه الى نفسك و اخف على قلبك - قال ايضا  
 بعض العلماء - لست اطلب العلم طمعا في بلوغ غايته  
 و السوفى على نهايته و لكن التماس ما لا يسع جهله و لا يحسن  
 بالعاقل اغفاله - و قال آخرون - علم الملك النسب و الخير -  
 و علم التجار الحساب و الكتاب - و علم اصحاب الحرب درس  
 كتب المغازي و كتب السير - و العلم بصر و خلافه عمى \*

## 3. Translate into Arabic :—

30

In the reign of Hārūn'r-Rashīd, there lived in Baghdād a merchant named 'Ali Khwāja. He had neither wife nor child. But he lived in content on the modest profit of his trade. One night he dreamed that an old man stood beside his bed and reproached him, saying, Why do you not go on the pilgrimage to Mecca? 'Ali Khwāja did not pay much attention to this dream. But when the same dream came three nights in succession, he became alarmed, and thought that if he did not obey the old man, some misfortune would befall him.

## PERSIAN

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## FIRST HONOURS PAPER

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English, adding explanatory notes where necessary :— 24

(۵)  
در ازل پرتو حسنت ز تجلی دم زد  
عشق پیدا شد و آتش بهمه عالم زد  
جلوه کرد رخت دید ملک عشق نداشت  
عین آتش شد ازین غیرت و بر آدم زد  
عقل میخواست کزان شعله چراغ افروزد  
برق غیرت بدرخشید و جهان برهم زد  
مدعی خواست که آید بتماشاگه راز  
دست غیب آمد و در سینۀ نامحرم زد  
دیگران قرعه قسمت همه بر عیش زدند  
دل غمدیده ما بود که هم بر غم زد

قظری کرد که بیند بجهان صورت خویش  
 خیمه در آب و گل مزرعه آدم زده  
 هست گرچه گبر هم یزدان پرست (b)  
 لیک قصد از مراد دیگرست  
 قلعه سلطان عمارت میکند  
 لیک دعوی امارت میکند  
 گشته باغی تاکه ملک او را برد  
 عاقبت خود قلعه سلطان را شود  
 مرمی ان قلعه برای بادشاه  
 میکند معمور نی از بهر جاه  
 زشت گوید ای شه زشت آفرین  
 قادری بر خوب و بر زشت مهین  
 خوب گوید ای شه حسن و بها  
 پای گردانیدیم از عیبها

2. (a) Give a critical appreciation of the poetry of Hāfiz. 12

(b) Assign the place of مثنوی معنوی in Persian Masnawī. 12

How far is Rūmī indebted to Sanā'i and 'Attār? Discuss.

3. (a) Write critical notes on any three of the following:— 9

- گلبنگ پهلوی - گوساله سامری - ابراهیم ادهم - دقیانوس

طامات و شطم

(b) Write philological notes on:— 9

آسمان - دادار - یزدان - دیوان - کدبانو - مرزبوم

4. Explain fully any three of the following:— 15

(a) چه سازی همی زین سرای سپنج

چه نازی بنام و چه بازی بگنج

(b) ای کبک خوشخرام کجا میروی بایست

غره مشر که گربه عابد نماز کرد

(c) جنگ هفتاد و در ملت همرا عذر بنه

چون ندیدند حقیقت در افسانه زدند

(d) بهر این بر گفت احمد در غطات  
دائما از قُرْءَ عَيْنِي فِي الصَّلَاةِ

5. (a) Give in Persian the summary of—

11

کلمو الناس علی قدر عقولهم.

Or, کنت کنزا مخفيا فاجبت ان اعرف فخلقت الخلق.

(b) Substitute words of Modern Persian for any eight of the following :—

6

- دستور - نژد - ستاره شمر - اندرخور - پاسخ - مایه - اید  
\* نبرد - گرد - بخردان

## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1 Translate into English :—

12

بعد ازان بزم آرای دوران در عشرت سرای ایران  
ساز ناسازی کوک کرد - در هر گوشه از مخالف و مواف  
نواها و از هر سری چون کاسه طنبور صداها بر خاسته - ترک  
و تاجیک چنگ آسا سینه بناخن حسرت خراشیدند - و کوچک  
و بزرگ قانون خرمنی از دست داده در دایره محنت  
کف زنان افسوس شدند و هر جا قوی دستی بود سر از  
گریبان خودسری و گردن فرازی در آورده پا از اندازه  
بیرون گذاشت - ازان جمله ملک محمود سیستانی بطریقی  
که مذکور شد بر مشهد مقدس مستولی شده رایت طغیان  
بر افراشت - و حضرت ظل الهی تا آن آوان در سرحدات  
مشغول ملک داری بردند \*

2. (a) What is the literal and original meaning of مشهد? How did it acquire the sense in which it is used in the above extract?

5

(b) Describe briefly the historical events to which the above extract refers.

5

(c) Who is meant by حضرت ظل الهی in the above extract?

5

Show that the idea expressed by the Arabic epithet ظل الله is of Persian origin.

3. Explain with reference to the context *any three* of the following :— 16

- (a) گنه طاعت شود بر صاحب خویش  
نهد چون عفو او پا در میانه
- (b) ره ملک سعادت میتوانند بی خطر رفتن  
بدست خود ز آئین ادب هر کس عصا دارد
- (c) تواند طی کند مردانده راه ملک و دولت را  
کسی کز راه و رسم حق پرستی با خبر باشد
- (d) نرود کس ز عطا خانه جودت محروم  
کاخ مقصود بعماری لطف بر پاست

4. Translate into English :—

12

اگر ناشرین ادیان مبعوثین من هستند - پس همه حق گویند و طریقه واحده می پریند - و اگر دیگران با عنارین مختلفه خدا می خواهند و خالق می جویند چون جز من خدای دیگر و خالق مکرر نیست البته مقصود و مرجع ترجمه آنها باز منم - ای دیوجان - وحدت الله را ذرات کائنات گواه است - زیرا که موجودات مرکب از ذرات است - و هر ذره فی حده هم واحد و هم حامل وحدت می باشد - پس ذره در کائنات نیست که منکر خود یا منکر وحدت من گردد - و اگر منکری پیدا شد همان وجود او اقرار اوست \*

5. Write a biographical note on the author of جهانکشی نادری and estimate the historical worth of the work. 10

6. (a) Show that عروض (i.e., the art of versification), though serving a useful purpose, is not indispensable for versification. 4

(b) Scan the following and name the metre :— 6

شاد باش ای عشق خوش سودای ما  
ای طبیب جمله علت های ما

7. Re-write in your own Persian either A or B, adding explanatory notes in brackets, where necessary :— 10

A.

درین بین از مبارزان مرد قصیر القامه که قدش به  
کوفتن چماق بزرگ بر سر حریف بلند بالای خود نارسا بود -

به سکوی مغازه بلور فروش بر جست - صاحب مغازه خواست پائیش اندازد - چماق را بلند کرد بزند - خورد به چهل چراغ آریزان بزرگ و شکست - هر شکسته بدیگری و دومی بسومی میخورد - پاره‌های بلور شکسته مثل تگرگ بسائر اسباب میافتاد و میشکست - دو لمحہ آن همه اسباب قیمتی بیک تل شکسته بی مصرف مبدل شد \*

B.

چون سلطان دار القرار ابتلا - یعنی مهر جهان آرا - بعزم تسخیر شهرستان حمل رایت اعلا افراخته - با لشکر بهار برهم زن هنگامه بهمین و غارت گر شهر دی گشت - و افغان هزارستان با هزار داستان شور افزای فرح آباد چمن و هزاره بلبل و بلوچ خارائی گل مالک پای تخت گلشن گردید - محمود یان با کمال شوکت و استیلا دست بتاخت و تاز دراز کرده باندیشه این که امداد از طرفی باصفهان خواهد رسید سلك جمعیت خود را از هم نمی پاشیدند \*

8. Compare the style of مسالك المحسنين with that of

10

جهان کشای نادری

### THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any two of the following:—

50

A.

نخست از خداوند متعال در ضمیر خویش دستگیری و معارفت خواسته و بدر توسل و توکل جسته گفتم برای من اسلم طرق و احسن شقوق طی راه از ساحل رود خانه جناست - فوراً ایشان رای مرا پسندیدند - اما افسوس که چون قلم قضا نه بر رضای ما رفته و بحکم ازلی خاتمت سر نوشت ما درین دار فانی جز فنا و تباهی چیزی نبود پیروی رای من که اهن تر از



دلالت غراب بود نتایم مشومه بخشید - طلیعه صبح  
 بخرواست خدا و حکم قضا راه افتادیم در ساعت تمام  
 در ساحل این رودخانه از بیدراه عبور کرده گاهی در  
 زمین شن فرو میرفتیم و گاهی در آجام و با تلاقها گیر  
 میکردیم - صغیر و صدای خزنده قلب مارا متزلزل  
 مینمود - بواسطه نداشتن چتر و نبودن درختی که سایه  
 بر سر ما افکند و ناچار در آن ظل گرم استوائی که هوا و  
 زمین را مانند تنور افروخته و آهن گداخته کرده بود  
 نمیتوانم بگویم چه بر ما و اطفال بیچاره ما گذاشت \*

B.

دوره طلائئ اسلام از حیث تمدن همان عهد خلفای  
 عباسی است و چنانکه گفتیم این دوره از پرتو دوشئون  
 اجتماعی که یکی وجود خلفای علم دوست فضیلت پرور و  
 دیگری وجود فقها و علمای متدین و صمیمی و باحمیت  
 بود بوجود آمد - و هرچه امروز بنام تمدن اسلامی نامیده  
 میشود بیشترش محصول این دوره و اغلب تولید کنندگان  
 آنهم غیرعرب بوده است - درین نهضت اسلامی از میان  
 خلفا مأمون و رزرای ایرانی عباسیان یعنی برمکیان و  
 از زمره علما و فقها نیز فرقه معتزله بهر رافر دارند  
 و سزاوار هر گونه مدح و ستایش میباشد - فرقه معتزله  
 جمعی از فقها و علما بودند که بمنقولات چندان اهمیت  
 نداده در اثبات احکام دین ببراهین عقلی متمسک میشدند  
 و قوانین مذهبی را به احکام عقلی تطبیق میکردند و  
 مسائل بسیار مهم فلسفی را مانند کون و ظهور و اثبات  
 و نفی و حدوث و قدم را موضوع بحث و مناقشه قرار  
 داده با براهین عقلی و منطقی و قیاس به اثبات عقاید  
 خود میکوشیدند \*

## C.

درین مقرنس زنگار خورد دود اندود  
 مرا بکام بد اندیش چند باید بود  
 به آه ازین قفس آبگون برارم گرد  
 باشک ازین کره آتشی برارم دود  
 چونیت هیچ تمیز از قصور عقل چه نقص  
 چونست هیچ سخندان وفور عقل چه سود  
 ز بس تراکم احوادث در سرای رجود  
 بجز بکتم عدم در نمیتوان آسود  
 بآفتاب اگر این سرم فرود آید  
 بدین سرم که ز گردوش در ربایم زود  
 به حسن تدبیر از مه کلف توانم برد  
 نمیتوانم ازین تیغ بخت زنگ زدود  
 ز تیغ گوهردار از نیام آسوده است  
 مرا ز تیغ زبان این نیام تن فرسود  
 به آفتاب و عطارد چه التفات کنم

## 2. Translate into Persian :—

50

Nature had largely endowed William with the qualities of a great ruler; and education had developed those qualities in no common degree. With strong natural sense and rare force of will he found himself, when first his mind began to open, a fatherless and motherless child, the chief of a great but depressed and disheartened party. The common people, fondly attached during a century to his house, indicated whenever they saw him, in a manner not to be mistaken, that they regarded him as their rightful head. The able and experienced ministers of the republic, mortal enemies of his name, came every day to pay their feigned civilities to him, and to observe the progress of his mind. The first movements of ambition were carefully watched: every unguarded word uttered by him was noted down; nor had he near him any adviser on whose judgment reliance could be placed. He was scarcely fifteen years old when all the domestics who were attached to his interest, or who enjoyed any share of his confidence, were removed from under his roof by the jealous Government. He remonstrated with energy beyond his years, but in vain. Such situations bewilder and unnerve the weak, but call forth all the strength of the strong.

## FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Explain in Persian with reference to the context :—

12

این خماین گون که چون ریم آهنم پالود و سوخت  
 شد سگهن پوشش از درد دل دروای من  
 روی خاک آلود من چون کاه بر دیوار جس  
 از رخم که گل کند اشک زمین اندای من  
 مار دیدی در گیا پیدچان کنون در غار غم  
 مار بین پیچیده در ساق گیا آسای من  
 اژدها بین حلقه گشته خفته زیر دامنم  
 زان نه جذبم ترسم آگه گردد اژدهای من  
 تا نترسد این دو طفل هند و اندر مهد چشم  
 زیر دامن پوشم اژدهای جانفرسای من

2. Explain the idea contained in

6

عمر پل است رخنه سر حادثه سیل پل شکن  
 کوش که نارسیده سیل از پل رخنه بگذری  
 آنکه غم جهان خورد کی خورد از حیات بر  
 پس تو غم جهان مخور تا ز حیات بر خوری

3. Explain the allusions in Persian of any two of the following :—

10

- (a) موسی از بهر صفورا کند آتش خواهی  
 وان شبانیش هم از بهر صفورا بینند  
 (b) سامری سیرم نه موسی سیرتم تا زنده ام  
 در سم گوساله آلاید ید بیضای من  
 (c) در ا در وادی ایمن که ناگاه

درختی گویدت اِنِّی اَنَا الله

4. Give in simple Persian the substance of one of the following extracts and the meaning of each bait in the same :— 14

## A

رخش بهرا بتاخت بر سر صفر آفتاب  
رفت بچرب آخری گنج روان در رکاب  
کحلی چرخ از گشت مسلسل بشکل  
عودی خاک از نبات گشت مهمل بتاد  
روز چو شمعی بشب نورده و سرفراز  
شب چو چراغی بروز کاسته و نیم تاب  
دردی مطبوع بین بر سر سبزه ز سیل  
شیشه نارنم بین بر سر آب حباب

## B.

در طریق کعبه جان چرخ زرین کاسه را  
از بی دریوزه جان کاسه گردان کرده اند  
کشتگان کز کعبه جان باز جانور گشته اند  
ماهی خضر اند گوئی کاب حیوان دیده اند  
کعبه جان زانوسی نه شهر جوی و هفت ده  
کین در جارا نفس اسیر و طبع دهقان دیده اند  
بر گذشته زین ده و زان شهر در اقلیم دل  
کعبه جان را بشهر عشق بنیان دیده اند

5. Annotate in Persian :—

16

وجود آن جزو دان کز کل فزون است  
که موجود است کل وین بازگون است  
بود موجود را کثرت برونی  
که از وحدت ندارد جز درونی  
وجود کل ز کثرت گشت ظاهر  
که از در وحدت جزوست سائر  
چو کل از روی ظاهر هست بسیار  
شود از جزو خود کمتر بمقدار

6. Give in Persian the substance of *one* of the following :—

10

(a) بنده آئینه اندر برابر  
 درو بنگر به بین آنشخص دیگر  
 یکی ره باز بین تا چیست آنکس  
 نه اینست و نه آن پس کیست آنکس  
 چو من هستم بذات خود تعین  
 نمیدانم چه باشد سایه من  
 عدم با هستی آخر چون شود ضم  
 نباشد نور و ظلمت هر در باهم  
 جز از من اندرین محسرا دگر نیست  
 بگو با من که تا صوت و صدا چیست

(b) وصال اینجایکه رفع خیال است  
 چو غیر از پیش برخیزد وصال است  
 مگر ممکن : حد خویش بگذشت  
 نه او واجب شد و نه واجب او گشت  
 هر آنکو در معانی گشت فائق  
 نگوید کین بود قلب حقائق  
 هزاران نشاء داری خواجه در پیش  
 برر آمد شد خود را ببندیش

7. Write a critical note on Khāqānī as a poet.

19

8. Translate into Persian :—

20

When the morning broke upon us, we saw none of our pursuers, and began to indulge the hope that they had given up the chase. We had, however, only made four miles in eight hours, and our prospect of escape can scarcely be said to have improved. About 7 a.m. we saw some natives bathing, and persuaded a coolie to talk with them, and try to induce them to give us some food. The fellow took from us eight rupees, and procured from one of the bathers a promise to obtain food. This man left his *lota* as a guarantee for his fidelity, but we saw no more of him.

## FIFTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

10

چون آثار این کواکب و قسط این عناصر تاثیر کرد  
از آن نقطهٔ مهوم منعکس شد از میان خاک و آب  
بمعونت آتش و باد این جمادات پدید آمد چون کوهها  
و کوهها چون برق و صاعقه و رعد و باران و کواکب  
منقضه و ذر ذاب و نیازک و عصی و هاله و حریق و  
زلزله و عیون گوناگون چنانچه در "آنا علویه" این را  
شرح تمام داده شده است و درین مختصر نه جای شرح  
و بسط آن بود \*

2. (a) Narrate the circumstances in which the quatrain beginning with

7

گر عیب سر زلف بت از کاستن است  
was composed.

(b) Explain fully :—

7

گر آدمی صفتی از ملک گرو ببری  
که سجده گاه ملک خاک آدمی زاد است

(c) Write notes on any three of the following :—

6

عمره الوثقی - چار دانگ عالم - سهم الغیب - قلعه اسفید -  
نفس ناطقه -

3. Either, Give an account of the life of Nizāmī 'Arūzī and discuss the importance of the *Chahār Maqāla*.

10

Or, Give the various sub-divisions of شجاعت .

4. Answer either Group A or Group B :—

## GROUP A.

(a) Translate into English :—

9

إنا فتحنا لك فتحاً مبيناً ليغفرک الله ما تقدم  
من ذنبک و ما تاخر و يتم نعمته عليك و يهديک  
صراطاً مستقيماً و ينصرک الله نصراً عزيزاً \*

- (b) Comment on the above verse in Persian. 6
- (c) Narrate the circumstances in which سورة الفتح was revealed. 8
- (d) Either, Write notes on :— 10
- مسجد الحرام - حرب خيبر - بيعت الرضوان - كلمة التقوى - منا
- Or, What do you understand by اخوان الصفا? What was its aim and object? Who were its principal members? 10
- (e) Translate into Arabic :—(i) This is the judge; (ii) Hast thou this book? ; (iii) No, I have that; (iv) What is your name? ; (v) My name is Hasan; (vi) How old are you? 30

## GROUP B.

Write an essay in classical Persian on one of the following subjects : 60

- (a) The Ismā'īlīa movement.  
 (b) Sa'dī as a poet and a prose-writer.  
 (c) Village life.

## SIXTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

## MUSLIM HISTORY.

*Answer any THREE of the following.*

1. How would you account for the amazing ease and rapidity with which the Arabs, though far inferior to the Persians in civilization, military training and numbers, were able to conquer Persia? 10
2. Enumerate and describe the disabilities under which the Persians laboured under the Umayyad rule. To what extent were they relieved of them by the 'Abbāsids? 10
3. Sketch the career of the founder of the Saffārid dynasty in Persia. 10
4. Describe the means devised and the policy adopted by the Saffāvids to bring about the political unity and prosperity of Persia. How far did they succeed? 10
5. 'Indians themselves were mainly responsible for the Muslim invasions of India.' Criticize the statement. 10

## HISTORY OF PERSIAN LITERATURE.

*Answer any FOUR of the following.*

1. How did the conquest of Persia by the Arabs affect the language and subsequent literature of the country? 10
2. Compare the Sāmānids with the Ghaznavids in regard to the patronage of letters. 10

3. Are the fabulous tales told in the *Shāhnāma* the products of 10  
Firdausi's own fertile imagination or based on ancient tradition?  
Name some of the works embodying these traditions.
4. 'Hāfiz was the king of all the *ghazal*-writers of Persia.' 10  
Refute or justify the verdict with arguments.
5. The Timūrids are credited with widening the range of Persian 10  
literature. Point out the directions in which this expansion took place.
6. When, under what circumstances, and by whom were the 10  
following books written? What is the subject matter of each?—

سیاست نامه - اخلاق ناصری - دانشنامه علایی -  
فرهنگ جهانگیری - قران السعیدین \*

## RHETORIC AND PROSODY.

1. Define and illustrate any four of the following :— 6
- ایهام - براعت استهلال - تنسیق الصفات - غلو -  
عکس - لزوم ما لا یلزم \*
2. Name and explain the figures of speech in any three of the 9  
following :—

- (a) از روزگار رتبه عالی طلب کنند یارب که سر بلند  
نمائی بدارشان -
- (b) گفتمش درمان من کن گفت خواهد شد بصبر  
گفتمش گر من بمیرم گفت این هم میشود
- (c) دل عکس رخ خوب تو در آب روان دید  
واله شد و فریاد بر آورد که ماهی
- (d) فرورشد بماه و بر شد بماه

بن نیزه و قبله بارگاه

3. Explain any four of the following terms with an example 6  
of each :—

بعر - رکن - حرف تاسیس - حرف دخیل - زحاف -  
قافیه شاکن -

4. Scan any three of the following :— 8

- (a) نعل می بستند روزی اکد شانت را بررم  
حلقه گم شد ازان در گوش قیصر یافتند
- (b) در بزم رصال تو بهنگام تماشا  
نظاره ز جنبیدن مژگان کله دارد



- (c) بمعشر حرف بی صوت است فریاد شهیدانش  
 نمی دانم که داد این سرمه چشم نیم خوابش را  
 (d) در کوی نیکنامی مارا گذر ندادند  
 گر تو نمی پسندی تغییر کن قضارا

Examiners— { MAULVI M. MAHFUZUL HAQ, M.A.  
 ,, SYED MUZAFFARUDDIN AHMAD, M.A.  
 AGA MD. KAZIM SHIRAZI.

### FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English :—

24

(a)

شگفته شد گل حمرا ر گشت بلبل مست  
 صلاى سرخوشى اى عاشقان باده پرست  
 اساس توبه که در محکمی چو سنگ نمود  
 ببین که جام زجاجی چه طرفه اش بشکست  
 بیار باده که در بارگاه استغنا  
 چه پاسبان و چه سلطان چه هوشیار و چه مست  
 ازین رباط دو در چو ضرورتست رحیل  
 رواق رطاق معیشت چه سر بلند و چه پست  
 مقام عیش میسر نمیشود بی رنج  
 بلی بحکم بلا بسته اند روز الست  
 شکوه آصفی و اسپ باد و منطق طهر  
 بباد رفت و ازو خواجه هیچ طرفه نبست

(b)

چهل روز بگذشت ازان خوب چهر  
 یکی کودک آمد چو تابنده مهر

درآ موبدش نام شاپور کرد  
 بدان شادمانی یکی سور کرد  
 تو گفتی همه فره ایزدیست  
 بر سر سایه و رایت بخردیست  
 چهل روزه شد رود و می خواستند  
 یکی تخت شاهی بیاراستند  
 برفتند گردان زرین کمر  
 بیاویختند از برش تاج زر  
 چون آن خرد را سیر دادند شیر  
 نوشتندش اندر میان حریر

2. (a) Explain the allusion in the 5th verse of 1 (a). 4  
 (b) What do you understand by *اسپ باد* and *شکوه آصفی* in 1 (a)? 4  
 3. (a) Give an account of the life of *either* Hāfiz or Rūmī. 10  
 (b) Narrate the circumstances in which *either* Firdausī wrote the *Shāhnāma* or Rūmī composed the *Masnawī*. 10  
 4. Explain fully any *three* of the following verses :— 15

(a)

مطلع شمس آ اگر اسکندری  
 بعد ازان هر جا روی نیکو فری  
 بعد ازان هر جا روی مشرق شود  
 شرقها بر مغربت عاشق شود

(b)

چون یکی موکڑ شد از ابروی ار  
 شکل ماه نو نمود آن موی ار  
 موی کڑ چون پرده گردون بود  
 چون همه اجزات کڑ شد چون بود

(c)

درین چمن گل بهخار کس نچید آری  
 چراغ مصطفوی با شرار بولهبیست

(d)

چون سامری مباحث که زر دید و از خری  
موسی بهشت و از بی گوساله میبرد

5. (a) Give in your own words the story of

10

رفیق راه عیسی و زنده کردن استخوانها

Or رفیق شاپور بطریق بازارگانی بروم

(b) Write short notes on any five of the following—

10

- آتش موسی - حسن بصری - جام جم - روضه دار السلام  
اصحاب کف - حسام الدین - شاپور اردشیر

(c) Give the opposite numbers of—

5

اصحاب - شرح - ملک - دولت - مطلع

6. Develop the idea contained in :—

8

اسایش دو گیتی تفسیر این در حوفاست  
با دوستان تطف با دشمنان مدارا

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

A.

1. Translate into English :—

24

در ایام استیلائی تسلط حجاج - که تنور ظلمش  
از خاشاک بیرحمی و شقارت بر می افروخت . و از  
آفت سموم جانگداز شرارت ذات نا مسعودش خشک  
و تر مزرعه حیات خاص و عام میسوخ - روزی از  
روزها که زورق عافیت حال جمعی از ذکور و اناث قبیله  
از قبائل مسلمان را لطمه بحر غضبش مشتغرق گرداب  
عتاب و خطاب ساخته بود چند طفل بنظر بی سعادتش  
در آوردند - آن ناپاک باشاره مفتی جرر سیاف را طلب

کرده حکم بر قتل صغیر و کبیر داد - طفلی با کمال  
صغر سن از میان آن قوم برخاست و بر فراز بلندی  
شتاف و گفت - ایها الامیر - اگر بیچاره اسدعی عرض  
مطلبی داشته باشد آیا بدستکاری غور رسیهای رای  
عالم آرای خداندی بدرجه اجابت رسد یا نه \*

## B.

حسین چون در روسیه تربیت شده - در مدارس روس  
خوانده - میان ملت روس نشو و نما یافته - روسیه را  
مداحی مینمود - طول و عرض ممالک روسیه را بیان  
میکرد - که در یکطرف مملکت آفتاب طلوع میکنند در  
طرف دیگر ظهر است - درین مملکت وسیعه رود خانه های  
کشتی رو - صحاری مسطح - صد و سی میلیون تبعه  
کار کن - بیشه های هزار فرسخی - هشتاد خروار طلائی  
حاصل یکساله معادن - سنگهای قیمتی و نقره و پلاتین  
و سرب و زینق و زغال سنگ بی حد و حساب است -  
همه اینها را با کمال فصاحت تشریح مینمود - در آئنده  
روسیه را مالک کل آسیا و از استامبول تا پکن تابع  
فرمان آند دولت می شمرد - و در این باب ایراد ادله های  
قدیم خارج از موضوع و حیز انتفاع مینمود - حسین  
ناطق غریبی است \*

2. (a) What is the significance and name of the **إضافت** in each of the following?— 4

تنور ظلمش - مستغرق گرداب - زغال سنگ - تابع فرمان

(b) Analyse the following into their component parts, giving the meaning of each part:— 4

گنجور - گرداب - آفتاب - خروار

(c) Write a grammatical note on **ادله ها** and mention any other similar words that you may remember. 4

(d) What part of speech is **میان** in **آنقرم میان** and **از میان آنقرم**? 4  
میان ملت ?

3. Explain as fully as you can any one of the following :—

12

(a)

قصر هستی بی وجودش بود پست  
از طفیلش هست شد هر چیز هست  
تا نهال هستی ذاتش نرست  
کاخ ایمان را نشد ارکان درست

(b)

کودک هوشمند پاک گهر \* حیف باشد که تربیت نشود  
گر نتابد بسینه پرتو علم \* مہبط فیض معرفت نشود

4. (a) Write notes on any four of the following :—

8

- مشهد مقدس - دارالمرز - قزلباشیہ - ولی عہد  
- امہات سفلی - ابای علوی - احرام

(b) Give the substance of the first dream of کمبیز.

8

(c) Mention some of the peculiar Islamic beliefs ascribed by the author of مسالک المحسنین to Zoroastrianism.

6

5. (a) A شعر is defined as کلام مرزون مقفی. Explain the terms مرزون and مقفی as fully as you can.

8

(b) Define any four of the following terms and give examples of each :—

12

- خرب - حشو - مزاحف - رتد مفروق - فاصلہ کبری  
- صدر - عروض - ابتدا

(c) Scan the following and name the metre :—

6

دام دلی اما چه دل گرنہ حرمان در بغل

### THIRD PASS PAPER

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Translate into English any two of the following extracts :—

50

A.

فیلبان گفت من بشما میگویم دغدغہ ر تشریش  
بغاطر خویش راہ دہید امیدوارم در ظرف این چہل

و هشت ساعت مامنی امن تر از اینجا برای شما  
 بصریم - فیلبان رفت و روز باختمام رسید با نهایت  
 اضطراب بال و انقلاب حال داخل شب شدیم - بر خلاف  
 عادت طبیعی شب که بایستی آرامی و امنیت خاطری  
 بیارد بر پریشانی و تزلزل بیفزود - دخترم از صبح  
 تا بهال مثل قالب بیروح بهیچوجه متکلم نشد -  
 شهرم اتصالاً راه میرفت چنین تصور می نمود که حرکت  
 و راه رفتن چنانکه معروف است در همه اوقات اشتها  
 می آورد شاید در وقت غلبه بدبختی و هجرم هموم  
 بر خلاف سایر حالات در مزاج او سد جوع نماید - اما  
 من اینقدرها فیلسوف نبودم - معده ام تهی و کله ام  
 از هر نوع تفکر خالی بود - گاهی دراز میکشیدم که  
 بلکه خرابم برده گرسنگی را فراموش کنم و گاهی  
 می نشستم خیال و سودای پسرم بسرم می افتاد که چه  
 بار روزی داده \*

## B.

در آغاز انتشار اسلام احکام و قوانین دینی بیشتر  
 مراعات و اجرا میشد و زهد و تقوی و عدل و مکارم  
 اخلاق در همه اعمال و افکار نفوذ و جریان داشت -  
 اگرچه حضرت رسول صلعم هر دو جنبه نبوت و سیاست را  
 دارا بود یعنی هم شارع و هم قاید قوم بود و امور  
 لشکری و قشون کشی و جنگها را خود بنفسه اداره میکرد  
 ولی خلفای او فقط بامور خلافت اکتفا میکردند و  
 اعمال اداری و سیاسی و جنگی را به اعمال و سرداران  
 مأمول می دادند - چونکه بجهت وسعت ممالک  
 مفتوحه و کثرت امور دینی وقت کافی برای اشتغال  
 با همه امور کشوری و لشکری نداشتند لیکن باوجود

این از مراقبت و تفتیش اعمال حکام و عمال و قضات  
و غیره آنی غفلت نمیکردند و هرکس بر خلاف عدل و  
دیانت کاری میکرد بمجازات سخت میرسانیدند - و خود  
تصدی امور خلافت را فقط یک تکلیف دینی میدانستند  
نه یک وسیله تسلط و جبروت \*

C.

ای شده نطق از برای شکر تو گویا  
پای طلب در طریق فکر تو پیویا  
گشته ز مرآت قدرت تو نمایان  
این همه نقش بدیع و صورت اشیا  
یافت ز مهر تو صبح عارض روشن  
همچو که رخسار شام جعد مطرا  
گرنه ز دریای قدرت تو روانست  
آب چسان آورد نتایج دیبا  
در بر صنع تو چشم عقل بتحقیق  
پرتو خورشید هست حیرت حربا  
ممکن را از واجبش خبر بچه دانش  
از همه هیچ آورد سخن بچه یارا  
ذات تو میخواست جلوه بنماید  
کرد ز خاک آشکار آدم و حوا  
گرنه غرض طرح عشق بود ز ایجاد  
هیات صورت نمیکرفت هیولا

2. Translate into Persian :—

50

A.

The general custom of the Arabs at meals is to place in their sitting-room a tray upon which the food is arranged. Around this they all sit together, and begin to eat, using wooden or metal spoons for their stews and soups, but the most common mode is to double up bits of

bread, and dip them into the dish. The rich use silver spoons, but they have neither knives nor forks, nor do they know how to use them. As their meat is either cut up into stews, or cooked until it is ready to fall to pieces, knives and forks are useless. When they have chickens, they tear them in pieces with their fingers. Such a practice would be considered coarse and vulgar in the West, but in the East it is otherwise. Whenever an attempt to ape Western manners has been made, it has generally proved a miserable failure. It is, therefore, better to let them retain their own custom.

## B.

The loss of life and property in these pilgrimages was very great. The people generally travelled on foot, not so much from poverty, but because the pains and fatigues and dangers of such a mode of travelling were considered meritorious, and likely to propitiate the deity. There were then in India no conveniences for travelling beyond, here and there, the bare walls of some serais, set up in times long gone, by some Musalman rulers, and guarded by a gate which was always shut and barred at night. Such accommodation could generally be procured for the sum of two pice. Everyone carried with him his own mat, and his own brass vessels for drinking and washing, which, though they were neither numerous nor heavy, yet formed a considerable burden for a pedestrian.

## FRENCH

(Pass and Honours.)

*Paper-Setters*— { REV. FR. E. POPULAIRE, S.J.  
 .. FR. SCHEPERES, S.J.  
 .. FR. P. TURMES, S.J.  
 { DR. S. C. MUKHERJEE.

*Examiners*— { REV. FR. VERBOCK HAVEN, S.J.  
 .. FR. E. POPULAIRE, S.J.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any two of the following extracts :—

24

- (a) S'immoler pour son non et pour son héritage,  
 D'un enfant d'Israël voilà le vrai partage :  
 Trop heureuse pour lui de hasarder vos jours !  
 Et quel besoin son bras a-t-il de nos secours ?  
 Que peuvent contre lui tous les rois de la terre :  
 En vain ils s'uniraient pour lui faire la guerre :  
 Pour dissiper leur ligue il n'a qu'à se montrer ;  
 Il parle, et dans la poudre il les fait tous rentrer.  
 Au seul son de sa voix la mer fuit, le ciel tremble ;  
 Il voit comme un néant tout l'univers ensemble :  
 Et les faibles mortels, vains jouets du trépas,  
 Sont tous devant ses yeux comme s'ils n'étaient pas.
- (b) Pour moi que tue reticus parmi ces infidèles,  
 Je sais combien je hais leurs fêtes criminelles,  
 Et que mets au rang des profanations  
 Leur table, leurs festins et leurs libations ;  
 Que même cette pompe où je suis condamnée,



Ce bandeau dont il faut que je paraisse ornée  
 Dans ces jours soleunels à l'orqueil dédiés,  
 Seule et dans le secret, je le foule à mes pieds ;  
 Qu'à ces vains ornements je préfère la cendre,  
 Et n'ai de goût qu'aux pleurs que tu me vois répandre.  
 J'attendais le moment marqué dans ton arrit.,  
 Pour oser de ton peuple embrasser l'intérêt ce moment est venu.

- (c) Je ne trouve qu'en vous je ne sais quelle grâce  
 Qui me chorme toujours et jamais ne me lasse.  
 De l'aimable vertu doux et puissants attraits !  
 Tout respire en Esthar l'innocence et la paix.  
 Du chagrin le plus noir elle écrate les ombres.  
 Et fait des jours sereins de mes jours les plus sombres ;  
 Que dis-je ? Sur ce trône assés auprès de vous.  
 Des astres ennemis j'en crains moins le couroux,  
 Et crois que votre front prête à mon diadème  
 Un éclat qui le rend respectable aux dieux mêmes.

2. Indicate the place of "Esther" in the evolution of Racine's dramatic art and of his spiritual life. 8

3. What was the occasion of the composition of "Esther"? Does the drama bear any trace of it? 8

Or, How far does "Esther" satisfy the criteria of a perfect tragedy?

4. Give a sketch of the character of Aman or of Mardochée. 7

5. What is the significance of the rôle of the choir in "Esther"? 7

6. How would you render into idiomatic English :— 10

*pour comble de gloire ; le ciel, qui pour moi fit pencher la balance ; le cri de son peuple est monté jusqu'à lui ; j'irai à sa rencontre ; elle y faisail la pluie et le beau temps.*

7. Comment grammatically on the use of the words in italics in the following : 6

(a) Je voudrais qu'un seigneur éminent *guidât* son coursier.

(b) Quelle voix salulaire ordonne que *je tire* ?

(c) *Ce sont* des monstres furieux.

(d) Le fer *ne counastra ni* le sexe *ni* l'âge.

8. Translate into English any two of the following extracts : 30

(a) Si j'étais la feuille que roule  
 L'aile tournoyante du vent  
 Qui flotte sur l'eau qui s'écoule,  
 Et qu'on suit de l'oeil en rêvant ;  
 Je me livrerais, verte encore,  
 De la branche me détachant,  
 Au zéphyr qui souffle à l'aurore,  
 Au ruisseau qui vient du couchant.

Plus loin que le fleur qui gronde,  
 Plus loin que les vastes forêts,  
 Plus loin que la gorge profonde,  
 Je fuirais, je courais, j'irais !

(b) Le piano que baise une main frêle  
 Unit dans le soir rose et gris vaguement,  
 Taudia qu'avec un très léger bruit d'aile  
 Un air bien vieux, bien faible et bien charmant  
 Rôde indiscret, épeuré quasiment.  
 Par le boudoir longtemps parfumé d'Elle.  
 Qu'est-ce que c'est que ce berceau soudain  
 Qui lentement drolote mon pauvre être ?  
 Que voudrais-tu de moi, d'un chant badin ?

Qu'as-tu voulu, fin refrain incertain  
 Qui va tantôt mourir vers la fenêtre  
 Ouverte un peu sur le petit jardin ?

- (c) Je suis comme le temps, ma ire est faite avec  
 La matière du monde;  
 Je fus avant l'immense Egypte, avant les Grecs,  
 Aux premiers jours l'onde;  
 J'ai dû naître sur l'eau, dans un matin puissant,  
 Sous la beizante écume,  
 Quand l'univers était un volcan plein d'euceus,  
 Un mal azur qui fume.  
 Je crois me souvenir de ce matin où vint  
 Sur mes lievres mouillées  
 Le poser à jamais le lyrisure divin  
 Aux ailes éployées !

## SECOND PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

- 1 Translate into English any two of the following extracts :—

24

(a) Louis XI avait fait beaucoup de bien à la Guyenne et aux Gascous. Il se fiait en eux, beaucoup trop. Dans son premier voyage du Midi, il n'avait voulu confier sa personne qu'à une garde gasconne. Il avait en quinzeans pour compoignon et confident le bâtord d'Armagnac; il lui avait donné le comminges, tant dispute'entre armagnoc et Foix, de plus les deux grands gouvernements de Guyenn et de Dauphiné, nos frontièes des Pyrénées et des alpes. Il avait, dès son avènement, signé au comte d'armagnac une grâce de lous ses crimes, qu'elle-même était un crime; il avait, sans sauci du droit ni de dieu, accorde abolition complete a cet Bomme effroyable, condamne pour meustre et pous tour. Et au boub ol'un an le brigond meltait les anglais dans ses places, si le roi n'en eut pris les clefs.

(b) On contait qu'il avait commencé sa fortune d'une manière singulière. Quand le vieux due devint chauve, et que beaucoup de gens se faisaient tondre pour lui faire plaisir, il y eut pourtant des recalcitrants qui tenaient à leur chevelure. Hagenbels s'établit, cisenoux en noir, aux portes de l' hotel, et lorsqu, ils arrivaient, il les faisait uendre sans pitié.—Voilà l' homme qu il fallait au due, un homme prêt à tout, qui ne vit d'obstacle à rien;—et non plus un comines qui aurait menti à chaque instant le difficile et l' impossible. Hagenbach, arrivant en alsace, dans un pays mal réglé, plein de choses flottantes qu il fallait peu à peu ordonner, trouva le vrai moyen de desesperer tout le monde; ce fut de mettre partout et tout d' abord ce qu'il appelait l'ordre, la règle et le droit.

(c) Il y a des gens à qui la faveur arrive comme un accident; ils en sont les premiers surpris et consternés; ils se reconnaissent enfin et se trouvent dignes de leur étoile; et comme si la stupidité et la fortune étaient deux choses incompatibles, on qu'il fut impossible d'être heureux et sot tout à la fois, ils se croient de l'esprit ils basorcent, que dis-je! Ils ont la confiance de parler en toute rencontre et sur quelque matière qui puisse s'offrir, et sous nul discernement, des personnes qui les e'content ajonterai-je qu'ils epouvantent on qu'ils donnent le dernier lieugout par leur fatuité et par leurs fadaïses? Il est vrai du moins qu'ils dishonorent sous ressource ceux qui ont quelque part au hasard de leur elevation

2. (a) What do you know about Theophraste ? 12  
 Compare his way of treating the 'Coracleves' with that of La Bruyere.  
 (b) 'Michelett is the most remarkable historian that France has produced; indeed, for originality and interest, there are few historians of any age or time to surpass him.' Discuss this opinion. 12  
 3. (a) Give the rule for the agreement of the past participle followed by an infinitive. Translate: I saw her running; I saw her applauded. 5  
 (b) What is the order in French of the pronouns governed by the verb? Give examples. 5  
 4. (a) Give sentences to show the use of: de sorte que, afin que, à moins que. pendant que. 8  
 (b) Translate: voila un homme comme il fauob voila l'homme qu'il faut. 4  
 5. Translate into English:— 30

(a) Bôentit ce ne fut plus une bataille; les Français etaient dispersés par petites troupes et se défendaient avec un incroyable courage. Il yeut parmi ce disastre les plus nobles faits d'armes; le duc d'Alençon se distingua entre tous. Il se mit avec dix-huit chevaliers de la bannière du Seigneur de Croy, qui avaient fait serment de pénétrer jusqu'au voi d'Angleterre et d'abattre sa couronne. Ils périèrent les rangs des anglais, et enfin le duc d'Alençon parvint presque seul au lieu ou combattait le roi; il abattit le duc d'York; le roi s'avança pour secourir son oncle. Alors le duc d'Alençon le frappa de sa hache, et fit sauter une partie de sa couronne. Leroi se releva et se mit vaillamment en defense.

(b) L'hirondelle s'est, sons facon, emparée de nos demeures; elle loge sous nos fenêtres, sous nos toits, dans nos cheminées. Elle n'a point du tout peur de nous. On dira qu'elle se fie à son aile incomparable; mais non: elle met aussi son nid, ses enfants, à notre porté. Voila pourquoi elle est devenue la maitresse de la maison. Elle n'a pas pris seulement la maison, mais notre coeur. Dans un logis de campagne où mon beau-père faisait l'éducation de ses enfants, l'été, il leur tenait la classe dans une serre ou les hirondelles nichaient, sous s'enquêter du mouvement de la famille, libres dans leur allure, tout occupées de leur couvée, sortant par la fenêtre et rentrant par le toit, j'ai tant avec les leurs bres hant et plus hant que le maître, lui faisant dire comme disait Saint Francois: "Soeurs hironde les, ne pourriez vous nous taire?"

### THIRD HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

#### A. COMPOSITION

1. Translate into classical French any two of the following passages:— 50

(a) I would say a few words, by the way, upon the question of pre-eminence between the charming arts of painting and music. I would cast my grain into the balance were it but a grain of sand, a mere atom. It is urged in favour of the painter that he leaves his works behind him, that his works outlive him and immortalise his memory. In reply to this we are reminded that musical composers also leave us their operas and oratorios. But music is subject to fashion and painting is not. The musical passages that deeply affected our forefathers seem simply ridiculous to the amateurs of our own day, whilst Raphael's pictures will enchant our descendants as greatly as they did our ancestors. This is my grain of sand.

(b) When I would visit a scene full of enthusiasm, and put forth all the strength of my imagination, I cling boldly to the flowing robe of the sublime blind poet of Albion at the moment when he soars heavenward, and dares approach the throne of the Eternal. What muse was able to sustain him in a flight so lofty that no man before him ever ventured to raise his eyes so high? From heaven's dazzling pavement, with envious eyes, I pass horror-stricken to the vast caverns of Satan's sojourn. I take my place at the infernal council, mingle with the hosts of rebellious spirits, and listen to their discourse.

- (c) River that in silence windest  
Through the meadows, bright and free,  
Till at length thy rest thou findest  
In the bosom of the sea.  
Four long years of mingled feeling,  
Half in rest and half in strife,  
I have seen thy waters stealing  
Onward like the stream of life.  
Thou hast taught me silent River,  
Many a lesson deep and long;  
Thou hast been a generous giver,  
I can give thee but a song.

## B. GRAMMAR

You are to attempt *three* questions only.

20

2. When is 'ne' used expletively in subordinate clauses? Give examples.

3. Give the French for *five* of the following expressions:—Is honour at stake? He is quite exhausted. I can stand it no longer. What grieves me most is your impertinence. I know no one who is truly happy. Tell me. I shall not tell you. The more we have, the more we want. Do not touch it, leave it as it is.

4. Illustrate by examples the difference in meaning between the French Imperfect and the Past Definite.

5. In which cases does the Past Participle take the sign of gender and number?

## C. HISTORY

*Two* questions only are to be answered.

30

6. Give an idea of the Mediaeval Culture in the days of St. Louis.

7. The reign of Napoleon III.

8. Who and what are the following: Mirabeau, the Edict of Nantes, Malplaquet, Richelieu, Thiers?

9. The vicissitudes of French Colonial Expansion.

## FOURTH HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into English any *three* of the following extracts:

24

- (a) Bien qu'on soit deux moitiés de la société,  
Ces deux moitiés pourtant n'ont point d'égalité:  
L'une est moitié suprême, et l'autre subalterne;  
L'une en tout est soumise à l'autre, qui gouverne;  
Et ce que le soldat, dans son devoir instruit,

Montre d'obéissance au chef qui le conduit,  
 Le valet à son maître, un enfant à son père,  
 A son supérieur le moindre petit frère,  
 N'approche point encor de la docileté,  
 Et de l'obéissance, et de l'humilité,  
 Et du profond respect où la femme doit être  
 Pour son mari, son chef, son seigneur et son maître.  
 Lorsqu'il jette sur elle un regard sérieux  
 Son devoir aussitôt est de baisser les yeux,  
 Et de n'oser jamais le regarder en face  
 Que quand d'un doux regard il lui veut faire grâce.

- (b) En sage philosophe on m'a vu vingt années,  
 Contempler des maris les tristes destinées,  
 Et m'instruire avec soin de tous les accidents  
 Qui font dans le malheur tomber les plus prudents ;  
 Des disgrâces d'autrui profitant dans mon âme,  
 J'ai cherché les moyens, voulant prendre une femme  
 De pouvoir garantir mon front de tous affronts,  
 Et le tirer de pair d'avec les autres fronts,  
 Par ce noble dessin, j'ai su mettre en pratique  
 Tout ce que peut trouver l'humaine politique ;  
 Et, comme si du sort il était arêté  
 Que nul poème ici-bas n'eût jamais exempté,  
 Après l'expérience et toutes les lumières,  
 Que j'ai pu m'acquérir sur de telles matières,  
 Après vingt ans et plus de méditation  
 Par me conduire en tout avec précaution,  
 De tout d'autres maris j'aurais quitté la trace,  
 Pour me trouver après dans le même disgrace !
- (c) Êtes-vous mon démon ou mon ange ?  
 Je ne sais, mais je suis votre esclave. Ecoutez.  
 Allez où vous voudrez, j'irai. Restez, partez,  
 Je suis à vous. Pourquoi fais-je ainsi ? je l'ignore.  
 J'ai besoin de vous voir et de vous voir encore  
 Et de vous voir toujours. Quand le bruit de vos pas  
 S'efface, alors je crois que mon cœur ne bat pas,  
 Vous me manquer, je suis absent de moi-même :  
 Mais dès qu'enfin ce pas que j'attends et que j'aime  
 Vient frapper mon oreille, alors il me revient  
 Que je vis et je sens mon âme qui revient.
- (d) On est jaloux on est méchant, pourquoi ?  
 Parce que l'on est vieux. Parce que beauté, grâce,  
 Jeunesse dans autrui, tout fait peur, tout menace,  
 Parce que l'on est jaloux des autres, et honteux  
 De soi. Dérision ! que cet air courtois,  
 Qui nous remet au cœur tant d'ivresse et de flamme  
 Ait oublié le corps en rajeunissant l'âme ! . . .  
 . . . O mes tous crénelés,  
 Mon vieux donjon ducal, que je vous donnerais,  
 Oh ! que je donnerais mes blâs et mes forêts,  
 Et les vastes troupeaux qui tendent mes collines,  
 Mon vieux nom, mon vieux titre, et toutes mes ruines,  
 Et tous mes vieux aïeux qui bientôt m'attendent,  
 Pour sa chambrée neuve et pour son jeune front !—  
 Car ses cheveux sont noirs, car son œil reluit comme  
 Le tien, tu peux le voir, et dire : Ce jeune homme !

2. Explain : douaire préfix, communauté des biens, fou fiéffé, traiter les gens de haut en bas, rien n'est ici-bas si grand que ton néant. 10

3. What was the Empire and how was the Emperor elected ? 8  
 4. Comment on the artistic quality of the dénouement of "L'Ecole des Femmes." 10

Or

Estimate the value of "Hernani" as a romantic drama and as a poem.

5. In what respects does the dramatic theory of the Romantic school differ from the dramatic theory of the Classical school ? 10  
 6. Give a sketch of the character of Agnes. 8

Or

"Molière's characters are types, not individuals."—How far is this true of Arnolphe and Chrysalde ?

7. Translate into French :— 30

(a) Outside the night was calm and warm. The thin crescent of the moon setting behind the woods lit up the country round as with the clear light of a lantern. The lengthened shadows of the lofty trees threw dark bands across the meadows, while in the open spots the grass assumed the soft appearance of greenish velvet.

But Françoise paid little heed to the night's mysterious charm. She fell to studying the landscape, looking for the sentinels that the Germans must have posted on the outskirts. She could see their shadows distinctly at intervals along the Moselle. A solitary one stood opposite the mill on the other bank of the stream, near a willow whose branches dipped into the water. He was a big fellow, standing motionless, his face upturned with a shepherd's dreamy look.

(b) Ariosto tells a pretty story of a fairy, who, by some mysterious law of her nature, was condemned to appear at certain seasons in the form of a foul and poisonous snake. Those who injured her during the period of her disguise were for ever excluded from participation in the blessings which she bestowed. But, to those who, in spite of her loathsome aspect, pitied and protected her, she afterwards revealed herself in the beautiful and celestial form which was natural to her, accompanied their steps, granted all their wishes, filled their houses with wealth, made them happy in love and victorious in war. Such a spirit is Liberty. At times she takes the form of a hateful reptile. She grovels, she hisses, she stings. But woe to those who in distrust shall venture to crush her ! And happy are those who, having dared to receive her in her degraded and frightful shape, shall at length be rewarded by her in the time of her beauty and glory.

## FIFTH HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate two of the following extracts :—

24

(a) Les anglais, pleins de confiance de leur beau-frère, le duc de Bourgogne, s'imaginaient le voir venir à la tête d'une grande armée. Kariva tout seul. Au moins, espéraient-ils qu'il les hébergerait, les nourrirait en route. Mais point ; sur leur chemin, il fermait ses places, les laissait coucher à la belle étoile. Seulement, il les encourageait en leur

montrant de loin les bonnes villes picardes, où le connétable avait hâte de les recevoir. Arrivés devant saint-Léventin "ils s'attendaient qu'on sonnât les cloches et qu'on portât au-devant la croix et l'eau bénite." Ka furent recus à coups de canon; il y eut deux ou trois hommes tués.

(b) Yennes étaient des suisses, ignorant tout, ayant envie de tout, gauches et maltraitées, et tout réussissait. Tout sert aux jeunes. Les factions, les rivalités intérieures, qui ruinent les vieux sages États, profitaient à ceux-ci. Les chevaliers des villes et les hommes des métiers faisaient partie des mimes corporatives et revalisaient de bravoure; le banneret tué, la bannière se relevait aussi ferme dans la main d'un boucher, d'un tanneur. Les chefs des partis opposés n'étaient d'accord que sur une chose, aller en avant, les Diesbach pour entraîner, les Bubenbergs pour s'excuser de l'amitié des Bourguignons et pour assurer leur honneur.

(c) Les hommes ont tant de peine à s'approcher sur leurs affaires, sont si épineux sur les moindres intérêts, si perissés de difficultés, veulent si fort tromper, et si peu être trompés; mettent si haut ce qui leur apporte, et si bas ce qui appartient aux autres, que j'avoue que je ne sais par où et comment se peuvent conclure les mariages, les contrats, les acquisitions, la paix, la trêve, les traites, les alliances.—À quelques uns l'arrogance tient lieu de grandeur; Curchumanite de fermeté, et la fourberie, d'esprit.—Les fourbes croient aisément que les autres le sont; ils ne peuvent jurer être trompés, et ils ne se trompent pas longtemps. Je me racheberai toujours fort volontiers d'être fourbe par être stupide et passer pour tel. On ne se trompe point en bien, la fourberie ajoute la malice au mensonge.

2. (a) Give an idea of the place occupied by the reign of Louis XI in the history of France. 10

(b) In your opinion, what is the impression created by Michelet in his treatment of Louis XI and Charles the Bold? 10

(c) Discuss the aim of La Bruyère in his 'Caractères.' 10

3. (a) What is the difference between a defective and an irregular verb? Can a verb be defective without being irregular? Give examples 3

(b) Translate :— 8

I see your sister coming; he has gone out; I am going out; although he says so, you must not believe him; what is the good of it?

4. Translate into French :— 30

(a) It was during the summer holidays which we were spending at a small village at the seaside. One morning my elder brother, who was fourteen, a cousin and myself started after breakfast for a long walk. We meant to go first along the coast and then return home through the woods. About midday, we saw an enormous rock, or rather a small island. We could reach it dry-footed, and evidently the sea never covered it, for grass grew on the top. We sat down there to eat our lunch, and we rested some time. All at once my brother looking towards the land cried out: "We are cut off."

(b) At last Fortunatus began to grow old, and his wife fell sick and died. The loss of her caused him so much grief, that soon after he fell sick too. As he thought he had not long to live, he called his two sons to his bedside, and told them the secret of the purse and cap, begging them never to make known these secrets to others. "Follow my example," said he: "I have had the purse these forty years, and no one ever knew from what source I obtained my riches." He then told them to live always together in friendship, embraced them and died.

## SIXTH HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

## A.

1. Translate into English two of the following passages :—

40

(a) D'où vient, cher Le Vayer, que l'homme le moins sage  
Croit toujours seul avoir la sagesse en partages  
Et qu'il n'est point de Fou, qui par belles raisons  
Ne l'égale son voisin aus Petites maisons ?  
Un pédant enivre de sa vaine science,  
Tout hérissé de grec, tout bouffi d'arrogance,  
Et qui de mille auteurs retenus mot par mot  
Dans sa tête entasse, n'a souvent fait qu'un sot,  
Croit qu'un livre fait tout et que sans Aristote  
La Raison ne voit goutte et le bon sens radote.  
D'autre part un Galant, de qui tout le métier  
Est de courir le jour de quartier en quartier,  
Et d'aller à l'abri d'une perruque blonde,  
De ses froides douceurs fatigues le beau monde,  
Condamne la science, et blâmant tout écrit  
Croit qu'en lui l'ignorance est un titre d'esprit. Boileau

(b) Mangez un pain vivant pétri de leur exemple,  
Si lien que, nourris d'euse, plus calmes et plus forts,  
Les portant comme un dieu dont vous seriez le temple,  
Vous sentiez vivre en vous tous ces illustres morts.  
Puis, sans vous arrêter, même à ces temps sublimes,  
Au récil trop étroit par votre essor rais,  
Toujours plus hant, toujours plus avant sur les cimes,  
Lancez dans l'idéal vos cœurs inassouvis,  
Plus hant ! toujours plus hant, vers ces hauteurs sereines  
Où nos désirs n'ont pas de flux et reflux,  
Où les bruits de la terre, où le chant des sirènes,  
Où les doutes railleurs ne nous parviennent plus !  
Plus haut dans le mépris des faux biens qu'on adore,  
Plus haut dans ces combats dont le ciel est l'enjeu,  
Plus haut dans vos amours. Montez, montez encore  
Sur cette échelle d'or qui va se perdre en Dieu. Victor De Laprade

(c) Si tu veux que la société répande sur ton âme plus de plaisirs ou de consolations que de chagrins ou d'amertumes sois indulgente ! Et préserve toi de la "personnalité" comme d'un poison qui en corrompt toutes les douceurs. La "personnalité" dont je voudrais te préserver n'est pas cette disposition constante à nous occuper sans distraction, sans relâche, de nos intérêts personnels, à leur sacrifier les intérêts, les droits, le bonheur des autres. Cet égoïsme est incompatible avec toute espèce de vertu et même de sentiment bonnête. Je parle de cette personnalité qui, dans les détails de la vie, nous fait tout rapporter aux intérêts de notre santé, de notre commodité, de nos goûts, de notre bien-être qui nous tient en quelque sorte toujours en présence de nous-mêmes, qui se nourrit des petits sacrifices qu'elle impose aux autres sans en sentir l'injustice et presque sans le savoir, qui trouve tout naturel et juste tout ce qui lui convient, injuste et bizarre tout ce qui la blesse ; qui crie au caprice et à la tyrannie si un autre, en la ménageant, s'occupe un peu de lui-même.

## B. LITERATURE

30

Answer any two questions.

2. Write short notes on any four of the following : Saint Simon ; Les Précieuses Ridicules ; Athalie ; Le Cid ; L'Aigle de Meaux ; Les Pensées ; Diderot.



3. Estimate the merits of La Fontaine as a poet and as a moralist.
4. Comment on the following appreciation: "That was an age in which the world, in all the plenitude of its brilliance had come into its own; when the sombre spirituality of the Middle Ages had been at last forgotten; when the literatures of Greece and Rome had delivered their benignant message; when civilisation could enjoy for a space its new maturity, before a larger vision had brought questionings, and an inward vision-aspirations unknown before."
5. How did J. J. Rousseau and Chateaubriand, each in his own way, prepare the Romantic Movement?

## C. PHILOLOGY

30

Answer any *two* questions.

6. Trace the origin of the four Conjugations and account for the Future Present.
7. Does the tonic accent of a Latin word influence the alterations the word undergoes and in what sense?
8. Give the origin of *four* of the following words:—fourcoyer; avenir; dorénavant; trop; école; bonnement; hôtel-Dieu.
9. What are *Doublets*? Illustrate their formation by concrete examples.

## FRENCH

Examiners— { REV. FR. VERBOCK HAVEN, S.J.  
 ,, FR. E. POPULAIRE, S.J.  
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## FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate *three* of the following extracts:—

24

- (a) Déplorable Sion, qu'as-tu fait de ta gloire?  
 Tout l'univers admirait ta splendeur;  
 Tu n'es plus que poussière; et de cette grandeur  
 Il ne nous reste plus que la triste mémoire.  
 Sion, jusques au ciel élevée autrefois,  
 Jusqu'aux enfers maintenant abaissée,  
 Puissé-je demeurer sans voix,  
 Si dans mes chants ta douleur retracée  
 Jusqu'au dernier soupir n'occupe ma pensée!
- (b) Quoi! Lorsque vous voyez périr votre patrie,  
 Pour quelque chose, Esther, vous comptez votre vie!  
 Dieu parle, et d'un mortel vous craignez le courroux.  
 Que dis-je? Votre vie, Esther, est-elle à vous?  
 N'est-elle pas au sang dont vous êtes issue?  
 N'est-elle pas à Dieu dont vous l'avez reçue?  
 Et qui sait, lorsqu'au trône il conduisit vos pas,  
 Si pour sauver son peuple il ne vous gardait pas?  
 Songez-y bien: ce Dieu ne vous a point choisie  
 Pour être un vain spectacle aux peuples de l'Asie.
- (c) Croyez-moi, chère Esther, ce sceptre, cet empire,  
 Et ces profonds respects que la terreur inspire,  
 A leur pompeux éclat mêlent peu de douceur,  
 Et fatiguent souvent leur triste possesseur.

Je ne trouve qu'en vous je ne sais quelle grâce  
 Qui me charme toujours et jamais ne me lasse.  
 De l'aimable vertu doux et puissants attraits.  
 Tout respire en Esther l'innocence et la paix.  
 Du chagrin le plus noir elle écarte les ombres,  
 Et fait des jours sereins de mes jours les plus sombres.

- (d) Seigneur, nous sommes seuls. Que sert de se flatter?  
 Ce zèle que pour lui vous fites éclater,  
 Ce soin d'immoler tout à son pouvoir suprême,  
 Entre nous, avaient-ils d'autre objet que vous-même?  
 Et, sans chercher plus loin, tous ces Juifs désolés,  
 N'est-ce pas à vous seul que vous les immolez?  
 Et ne craignez-vous point que quelque avis funeste.....  
 Enfin la cour nous hait, le peuple nous déteste,  
 Ce Juif même, il le faut confesser malgré moi,  
 Ce Juif, comblé d'honneurs, me cause quelque effroi.

2. Write a short account of Racine. What are his great merits as a poet? Illustrate your answer by quotations or examples taken from *Esther*. 12

3. Write a brief sketch of two of the following characters:—Aman, Assuérus, Esther, and Mardochée. 12

4. (a) Give the principal parts (*temps primitifs*) of—*pérr*, *craignez*, *dis*, *reçue*, and *sait*. 5

(b) What is meant by a defective verb? Give an example. 2

(c) Give synonyms for—*respects*, *terreur*, *éclat*, *innocence*, and *paix*. 5

5. (a) Account for the agreement of the following participles: fait 1 (a): *élevée* 1 (a); *reçue* 1 (b). 5

(b) Give the comparative and superlative of *bon* and *mauvais*. 2

(c) Give the feminine for—*Juif*, *empereur*, and *dieux*. 3

6. Translate one of the following passages:— 30

(a) Tout entier aux projects pieux qu'il a conçus,  
 Le saint prêtre est toujours en course et se prodigue,  
 Et revient tous les soirs épuisé de fatigue;  
 De l'ancien précepteur des enfants de Gondi  
 Le zèle ne s'est pas un instant refroidi;  
 Quand il a visité la mansarde indigente,  
 Il va demander l'aumône à la Regente,  
 Il sollicite, il prie, il insiste, emporté  
 Par son infatigable et forte charité,  
 Recevant de la gauche et donnant de la droite,  
 Pourtant il est malade et vieux et son pied boite;  
 Car, afin d'obtenir la grâce qu'il voulait,  
 Il a trainé six mois la chaîne et le boulet  
 D'un forcat innocent, dont il a pris la place.

(b) 'Trois jours', leur dit Colombe, 'et je vous donne un monde !'  
 Et son doigt le montrait, et son œil, pour le voir,  
 Perçait de l'horizon l'immensité profonde,  
 Il marche, et des trois jours le premier jour à lui :  
 Il marche, et l'horizon recule devant lui  
 Il marche, et le jour baisse; avec l'azur de l'onde  
 L'azur d'un ciel sans borne à ses yeux se confond;  
 Il marche, il marche encore, et toujours; et la sonde  
 Plonge et replonge en vain dans une mer sans fond.  
 Le pilote en silence, appuyé tristement  
 Sur la barre qui crie au milieu des ténèbres,

Ecoute du roulis le sourd mugissement,  
 Et des mâts fatigués les craquements funèbres.  
 Les astres de l'Europe ont disparu des cieux;  
 L'ardente Croix du Sud épouvante ses yeux.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate *two* of the following extracts:—

24

(a) L'on n'écrit que pour être entendu; mais il faut du moins, en écrivant, faire entendre de belles choses. L'on doit avoir une diction pure, et user de termes qui soient propres, il est vrai; mais il faut que ces termes si propres expriment des pensées nobles, vives, solides, et qui renforcent un très beau sens. C'est faire de la pureté et de la clarté du discours un mauvais usage que de les faire servir à une matière aride, infructueuse, qui est sans sel, sans utilité, sans nouveauté. Que sert aux lecteurs de comprendre aisément et sans peine des choses frivoles et puériles, quelquefois fades et communes, et d'être moins incertains de la pensée d'un auteur qu'ennuyés de son ouvrage!

(b) On ne pourrait se défendre de quelque joie à voir périr un méchant homme; l'on jouirait alors du fruit de sa haine, et l'on tirerait de lui tout ce qu'on en peut espérer, qui est le plaisir de sa perte. Sa mort enfin arrive, mais dans une conjoncture où nos intérêts ne nous permettent pas de nous en réjouir: il meurt trop tôt ou trop tard.—Il est pénible à un homme fier de pardonner à celui qui le surprend en faute et qui se plaint de lui avec raison: sa fierté ne s'adoucit que lorsqu'il reprend ses avantages, et qu'il met l'autre dans son tort.—Comme nous nous affectionnons de plus en plus aux personnes à qui nous faisons du bien, de même nous haïssons violemment ceux que nous avons beaucoup offensés.

(c) Le caractère de celui qui veut hériter de quel-qu'un rentre dans celui du complaisant; nous ne sommes point mieux flattés, mieux obéis, plus suivis, plus entourés, plus cultivés, plus ménagés, plus caressés de personne pendant notre vie, que de celui qui croit gagner à notre mort et qui désire qu'elle arrive.—Tous les hommes, par les postes différents, par les titres et par les successions, se regardent comme héritiers les uns des autres, et cultivent par cet intérêt, pendant tout le cours de leur vie, un désir secret et enveloppé de la mort d'autrui: le plus heureux dans chaque condition est celui qui a plus de choses à perdre par sa mort et à laisser à son successeur.

2. (a) Is La Bruyère more remarkable as a moralist or as an artist? Explain.

20

(b) What were the reasons for the success of his book?

(c) Show how the circumstances in which he was placed favoured him in the task of writing it.

3. (a) In what way do the French avoid the use of the passive? Give examples.

5

(b) Show the mistakes in the following:—

5

(i) Elle s'est cassée sa jambe.

(ii) Ces enfants nous ont obéis.

(iii) Je le vois venant.

(iv) Allez et cherchez pour mon ardoise.

(v) C'est moi qui vous le dit.

(c) What construction follows the verbs—*craindre, ne pas douter, empêcher*? Give examples. 6

(d) Translate :—I am cold; my teeth ache; this is cheap; mind your own business; from day to day. 10

4. Translate :— 30

(a) Pétrarque a planté un laurier sur ce tombeau, et Pétrarque n'est plus, et le laurier se meurt. Les étrangers qui sont venus en foule honorer la mémoire de Virgile, ont écrit leurs noms sur les murs qui environnent l'urne. On est importuné par ces noms obscurs qui semblent là seulement pour troubler la paisible idée de solitude que ce séjour fait naître. Il n'y a que Pétrarque qui fût digne de laisser une trace durable de son voyage au tombeau de Virgile. On redescend en silence de cet asile funéraire de la gloire; on se rappelle et les pensées et les images que le talent du poète a consacrées pour toujours. Admirable entretien avec les races futures, entretien que l'art d'écrire perpétue et renouvelle!

(b) Vous n'avez jamais vu d'homme si heureux que le sergent Hornus les jours de bataille, lorsqu'il tenait sa hampe à deux mains, bien affermie dans son étui de cuir. Il ne parlait pas, il ne bougeait pas. Sérieux comme un prêtre, on aurait dit qu'il tenait, quelque chose de sacré. Toute sa vie, toute sa force, était dans ses doigts crispés autour de ce beau haillon doré sur lequel se ruiaient les balles, et dans ses yeux pleins de défi qui regardaient les Prussiens bien en face, d'un air de dire : 'Essayez donc de venir me la prendre .....' Personne ne l'essaya, pas même la mort. Après Borny, après Gravelotte, les batailles les plus meurtrières, le drapeau s'en allait de partout, haché, troué, transparent de blessures; mais c'était toujours le vieil Hornus qui le portait.

### THIRD PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Answer the questions marked with an asterisk, and any THREE of the remainder.*

\*1. Translate into French *two* of the following passages : -

(a) A peasant found one day a snake quite benumbed and half dead with cold. Touched with compassion, he carried it to his dwelling and stretched it out near the fire to warm it. Hardly did the benumbed animal begin to revive when it only thought of wounding him who had saved its life. 'Ungrateful one,' said the peasant full of rightful anger, 'thy wicked heart deserves another treatment.' Saying these words, he took his axe and cut the snake to pieces. 25

(b) The epithet so often heard, and in such kindly tones of poor Goldsmith, speaks volumes. 'Let not his frailties be remembered,' said Johnson, 'he was a very great man.' But, for our own part, we rather say, 'Let them be remembered,' since their tendency is to endear; and we question whether he himself would not feel gratified in hearing his reader close the volume with the kind-hearted phrase, so fondly and so familiarly ejaculated, of 'Poor Goldsmith.' 25

(c) Two thieves having stolen a mule had driven it into a forest. There they consulted about the price which they were to ask for it, and about the share which should fall to the lot of each. But a quarrel arose between them, and they soon came to blows. In the thick of the quarrel, a third thief quietly stole near to them, mounted on the mule, and made off without being seen. They did not become aware of it until the beast was already too far off to be caught again. A good application of the proverb—'Lightly come, lightly go.'

- \*2. Give an idiomatic rendering of any four of the following :— 12
- (a) There you are.
  - (b) The train has just left.
  - (c) I speak to you as a friend.
  - (d) He had a broad chest and high shoulders.
  - (e) I must go away.
  - (f) It is fair that you should compensate him.
3. Give the Sequence of Tenses in French. 8
4. Illustrate the various meanings and constructions of any four of the following verbs :—*convenir, tenir, servir, user, descendre*. 8
- \*5. Give a brief account of France during the thirteenth century. 14
6. How was the Renaissance brought about in France, and what influence did it exercise on French culture? 8
7. Give a brief account of the career of Napoleon I. 8
8. Sketch the relations between France and Germany from 1870 to our own time. 8

## LATIN

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## FIRST PASS PAPER

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate :— 16
- (a) Tum sic Hyrtacides : 'audite o mentibus aequis,  
Aeneadae, neve haec nostris spectentur ab annis,  
quae ferimus. Rutuli somno vinoque soluti  
conticuere; locum insidiis conspeximus ipsi,  
qui patet in bivio portae, quae proxima ponto:  
interrupti ignes, aterque ad sidera fumus  
erigitur; si fortuna permittitis uti  
quaesitum Aenean et moenia Pallantea,  
mox hic cum spoliis ingenti caede peracta  
adfore cernetis. nec nos via fallit euntis;  
vidimus obscuris primam sub vallibus urbem  
venatu adsiduo et totum cognovimus annum.'

- (b) Nec longum in medio tempus, cum clamor, ad auris pervenit ac videt Euryalum, quem iam manus omnis fraude loci et noctis, subito turbante tumultu, oppressum rapit et conantem plurima frustra, quid faciat? qua vi iuvenem, quibus audeat armis eripere? an sese medios moriturus in ensis inferat et pulchram properet per volnera mortem?
- (c) Talibus orabat Iuno, cunctique fremebant caelicolae adsensu vario: ceu flamina prima cum deprensa fremunt silvis, et caeca volutant murmura, venturos nautis prodentia ventos, tum pater omnipotens, rerum cui summa potestas, infit: eo dicente deum domus alta silescit, et tremefacta solo tellus; silet arduus aether; tum Zephyri posuere; premit placida aequora pontus.
- (d) Sir ruit in densos alacer, Mezentius hostis, sternitur infelix Acron, et calcibus atram tundit humum expirans, infractaque tela cruentat. atque idem fugientem haud est dignatus Orodem sternere, nec iacta caecum dare cuspidem volnus: obviis adversoque occurrit, seque viro vir contulit, haud furto melior, sed fortibus armis. tum super abiectum posito pede nixus et hasta 'pars belli haud temnenda, viri, iacet altus Orodem.'

2. Write brief notes on :—*sceptra Palatini; genetrix Berecynthia; qualis Nereia Doto et Galatea; non hic Atridae nec fandi fictor Ulixes; magna dicione iubeto Carthago premat Ausoniam; intempestae Graviscae; viz proram attigerat; rumpit Saturnia funem; Mavors; ubi hic Iuno demissave nubibus Iris?; nemorum Latonia custos.* 12

3. Either, Explain the grammatical construction of 12

- (a) Turne, quod optanti divom promittere nemo auderet, volvenda dies en attulit ultro.
- (b) Sequor omina tanta, quisquis in arma vocas.
- (c) Tenebrum mirantur inertia corda, non aequo dare se campo, non obvia ferre arma viros, sed castra fovere.
- (d) Mene igitur socium summis adiungere rebus, Nise, fugis?
- (e) Euryale, audendum dextra.
- (f) Nihil illi tendere contra, sed celerare fugam in silvas et fidere nocti.
- (g) En qui nostra sibi bello conubia poscunt!

Or, Account for the various subjunctives in the extracts in Question 1, and explain the forms—*quaesitum, euntis, adfore* in 1 (a); the case of *fraude* in 1 (b); the construction of *eo dicente* in 1 (c).

4. Scan any consecutive six lines of the extracts in Question 1; also— 12

Haud aliter Troianae acies aciesque Latinae concurrunt, haeret pede pes, densusque viro vir.  
Give a brief description of the Virgilian hexameter.

5. Either, Tell briefly the story of Nisus and Euryalus. 9

Or, Mention any forms or constructions found in Virgil that would not occur in Latin prose.

6. *Either*, What in your opinion are Virgil's chief merits as a poet? Illustrate if you can from *Aeneid* IX and X. 9

*Or*, What is the place of the *Aeneid* in the development of Latin poetry?

7. Translate:—

30

- (a) Nox erat, et placidum carpebant fessa soporem  
 corpora per terras, silvaeque et saeva quierant  
 aequora, cum medio volvuntur sidera lapsu,  
 cum tacet omnis ager, pecudes pictaeque volucres,  
 quaeque lacus late liquidos quaeque aspera dumis  
 rura tenent, somno positae sub nocte silenti  
 lenibant curas et corda oblita laborum.  
 at non infelix animi Phoenissa, neque umquam  
 solvitur in somnos oculisve aut pectore noctem  
 accipit: ingeminant curae, rursusque resurgens  
 saevit amor, magnoque irarum fluctuat aestu.  
 sic adeo insistit secumque ita corde volutat:  
 'en, quid ago? rursusne procos inrisa priores  
 experiar, Nomadumque petam conubia supplex,  
 quos ego sim totiens iam dedignata maritos?'
- (b) Beatus ille qui procul negotiis,  
 ut prisca gens mortalium,  
 paterna rura bodus exercet suis  
 solutus omni faenore,  
 neque excitatur classico miles truci,  
 neque horret iratum mare,  
 forumque vitat et superba civium  
 potentiorum limina.  
 ergo aut adulta vitium propagine  
 altas maritat populos,  
 aut in reducta valle mugientium  
 prospectat errantis greges,  
 inutilisque falce ramos amputans  
 feliciores inserit  
 aut pressa puris mella condit amphoris,  
 aut tondet infirmas oves.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words  
 as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate:—

20

(a) Est enim haec, iudices, non scripta, sed nata lex: quam non  
 didicimus, accepimus, legimus, verum ex natura ipsa arripimus,  
 hausimus, expressimus, ad quam non docti, sed facti, non instituti,  
 sed imbuti sumus, ut si vita nostra in aliquas insidias, si in vim, si  
 in tela aut latronum aut inimicorum incidisset, omnis honesta ratio  
 esset expediendae salutis.

(b) Si haec non gesta audiretis, sed picta videretis, tamen appareret uter esset insidiator, uter nihil cogitaret mali, cum alter veheretur in rheda penulatus, una sederet uxor. Quid horum non impeditissimum? vestitus, an vehiculum, an comes? quid minus promptum ad pugnam, cum penula irretitus, rheda impeditus, uxore paene constrictus esset? Videte nunc illum, primum egredientem e villa subito: cur vesperi? quid necesse est tarde? qui convenit, praesertim id temporis? Devertit in villam Pompeii. Pompeium ut videret? Sciebat in Alsiensi esse. Villam ut perspiceret? millies in ea fuerat. Quid ergo erat? mora et tergiversatio: dum hic veniret, locum relinquere noluit.

(c) Responsum legatis est neque Romanorum in se meritum esse neque Carthaginiensium iniuriam ob quae aut pro Romanis aut adversus Poenos sumant arma; contra ea audire sese gentis suae homines agro finibusque Italiae pelli a populo Romano stipendiumque pendere et cactera indigna pati.

(d) Tætra ibi luctatio erat lubrica glacie non recipiente vestigium et in prono citius pedes fallente, ut, seu manibus in adsurgendo sen genu se adiuvisset, ipsis admuniculis prolapsis iterum corruerent; nec stirpos circa radicesve, ad quas pede aut manu quisquam eniti posset, erant: ita in levi tantum glacie tabidaque nive volutabantur.

2. Explain any four of the following expressions:—*annam levare*; *onutto festos et actos et institutos dies*; *officiosi labores*; *praerogativa militaris*; *meis auspiciis*; *patrum auctoritas*. 12

3. Either, Sketch with dates the career of T. Annus Milo. 14

Or, State the circumstances under which Cicero had to plead for Milo. What use does he make of the *Lex nata, non scripta*?

4. Account for each of the subjunctives in the first sentence of 1 (b). 10

5. Give the position and modern names of the Druentia, Isara, Rhodanus, and of Saguntum. What events does Livy narrate about them? 14

6. Translate:— 30

Dum altercationibus magis quam consiliis, tempus teritur, Hannibal ex acie, quam ad multum diei tenuerat instructam, cum in castra ceteras reciperet copias, Numidas ad invadendos ex minoribus castris Romanorum aquatores trans flumen mittit. Quam inconditam turbam cum vixdum in ripam egressi clamore ac tumultu fugassent, in stationem quoque pro vallo locatam atque ipsas prope portas evecti sunt. Id vero adeo indignum visum, ut ea modo una causa, ne extemplo transirent flumen tenerit Romanos quod summa imperii eo die penes Paulum fuerit.

### THIRD PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate into Latin:—

35

(a) When with infinite toil they had climbed up the greater part of that steep ascent, Balboa commanded his men to halt, and advanced alone to the summit, that he might be the first to enjoy a spectacle which he had so long desired. As soon as he beheld the South Sea stretching in endless prospect below him, he fell on his knees, and, lifting up his hands to heaven, returned thanks to God, who had conducted him to a discovery so beneficial to his country and so honourable to himself. His followers observing his transports of joy, rushed forward to join in his wonder, exultation, and gratitude. They held on their course to the shore with great alacrity, when Balboa,



advancing into the waves with his buckler and sword, took possession of that ocean in the name of the king his master, and vowed to defend it with these arms against all his enemies.

(b) (i) The manner of his death I have never heard; all the world knows that he is dead. 15

(ii) So far from hating him, I am anxious to defend him against his deadliest enemies.

(iii) I told him that if he had been wise he would have come the day before.

2. Mention and illustrate the various uses and meanings of either *quin* or *dum*. 5

3. What do you mean by gerundive attraction? Give examples. 5

4. Give, with illustrative examples, the constructions with—*polliceor*, *impero*, *refert*, *vereor*, *pudet*. 5

5. Distinguish between *quisque*, *quisquem*, *quisquis*; *vinxi*, *vixi*, *vici*; *ferri*, *feri*; and give the comparative and superlative of—*difficulus*, *strenuus*. 5

6. Answer three of the following questions :—

(a) Describe briefly the relations between Rome and the Gauls, both in and outside Italy, at various periods of her history. 10

(b) Explain :—*interregnum*, *provocatio*, *cives sine suffragio*, *nobiles*, *imperium*. 10

(c) Sketch briefly the development of Rome's provincial empire either before or after 100 B.C., giving the occasion on which each province was added. 10

(d) Describe the Constitution of Sulla, and account for its failure. 10

(e) Sketch briefly the reorganization of the Roman Empire by Diocletian. 10

(f) Discuss the importance of the reign of Constantine the Great. 10

## LINGUISTICS

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### FIRST PASS PAPER

Answer FOUR questions.

All questions are of equal value.

1. 'Languages tend from the synthetic to the analytic type.' Discuss this statement.

2. Write a brief essay on the origin of language.

3. Explain the principle of 'morphological classification' of languages. How have languages been thus classified? Name at least *one* language belonging to each class.

4. What part does analogy play in the development of a language? What is meant by false analogy?

5. Explain *five* of the following terms, giving examples :—malapropism, doublets, metathesis, reduplication, cognate forms, assimilation, polysynthesis, rhotacism, syncope.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Answer Question 1 and any FIVE of the remainder.*

1. What are the main 'language types' in the world? Specify their distinguishing characteristics and give *three* examples of each. Are these types in any way connected with each other? 20
2. Write short notes on any *four* of the following :—Russian, Gothic, Etruscan, Basque, Japanese, Finnish. 16
3. How are the Indo-Iranian languages related to each other? Make a table to show these relationships. What position in this table would you assign to the Dardic group? 16
4. What is meant by 'dentals,' 'velars,' 'labials,' and 'alveolars'? 16
5. What is the exact difference between a 'sonant' and a 'semi-vowel,' and between a 'spirant' and a 'stop'? 16
6. What and where are the following :—the blade of the tongue, the soft palate, the uvula, and the epiglottis? 16
7. What are the Semitic languages? What is their importance in history? Name their chief peculiarities and mention the names of any *four* of them (ancient or modern). 16
8. Write an account of any language family you may choose, except the Semitic and the Indo-European. 16

## THIRD PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Only six questions are to be attempted.*

*The questions are of equal value.*

1. What is language? Write what you know about the Indo-European languages with special reference to their Aryan branch.
2. What do you understand by Indo-Aryan vernaculars? Why are they so called? Name them all and the localities in which they are spoken.
3. Write a note on Hindi and Hindustani.
4. Write a note on the Pisacas and the modern Pisaca languages.

5. Discuss the theory that the North-western, Southern, and Eastern Indo-Aryan vernaculars are closely connected.

6. Write an account of Eastern Hindi, explaining its position with regard to Hindi and Bihari.

7. Describe the Austric family of speech briefly and name the languages, if any, belonging to it which are spoken in India.

8. Discuss the origin and development of Indo-Aryan vernaculars.

9. Draw a map of India locating the Dravidian and Indo-Aryan languages.

10. Write brief notes on six of the following :—Tulasīdāsa, Lallū Lāl, Mallik Muhammad, Wali, Rekhti, Kāsmiri, Avadhī, Sapādalakṣa.

## HISTORY

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		PROF. D. R. BHANDARKAR, M.A., Ph.D.
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		MR. K. ZACHARIAH, M.A. (Oxon.).

## FIRST HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Candidates are permitted to answer six questions only, of which not more than two must be taken from any of the groups A, B, C, D.*

*The questions are of equal value.*

### A.

1. Discuss with the aid of a sketch-map any one of the following :—

(a) The reasons for the collapse of the power of Charles V in Germany after 1548.

(b) The operation of the theory of the balance of power during the reign of Louis XIV.

(c) The dangers lurking in the Settlement of Vienna.

2. Compare the services rendered by Luther and Calvin respectively to the Reformation movement.

3. 'The Reformation in France never developed into a national movement. Why?'

4. Give an account of the foreign policy of Richelieu. How far was he right in urging France to a policy of aggrandisement?

## B.

5. How far is it true to say that the War of the Spanish Succession was 'a war of trade'?

6. Was the decline of Poland due principally to foreign rulers and foreign intervention? Did Russia act wisely in agreeing to the partition?

7. 'The ideal of the early manhood of Joseph II was his mother's foe, Frederick the Great of Prussia; the ideal of his later years was the Empress Catharine of Russia.' Discuss.

8. 'The Seven Years' War was an attempt on the part of Austria and Russia to destroy Prussia; it was the turning-point in the great colonial struggle between England and France.' Develop.

## C.

9. How far was the rapid development of the French Revolution due to the attitude of the rest of Europe?

10. 'The people,' said Napoleon, 'must have a religion and that religion must be in the hands of the government.....People say I am a papist. I am nothing. I was a Muhammadan in Egypt. I shall be a Catholic in France for the good of the people.' Discuss with reference to the relationship between the Church and the State in France during Napoleon's régime.

11. Give your own estimate of Europe's debt of gratitude to Napoleon.

12. Metternich wrote to his wife: 'I have become a species of moral power in Germany and perhaps even in Europe.' Do you agree?

## D.

13. To what extent is it true that 'Italy made herself'?

14. Discuss the historical importance of the career of *two* of the following:—(a) Mirabeau, (b) George Canning, (c) Kosciusko, (d) Stein.

15. Give a critical estimate of the statesmanship of Bismarck.

16. Decazes's principle was to royalize France and to nationalize monarchy. How far did this policy succeed in France?

## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Not more than six questions are to be answered.*

*All questions are of equal value.*

1. The fall of Pitt the Elder was followed by a definite attempt on the part of George III to recover for the royal power many of the prerogatives which the Crown had enjoyed previous to the Revolution of 1688. Elucidate.

2. Describe the progress of manufacture in England during the second half of the eighteenth century.

3. How far do you agree with the view that North's Ministry marks the triumph of the king and the temporary establishment of the system of departmental government?

4. Though the Stamp Act was a ludicrous failure and had to be repealed, yet it is difficult not to condemn the Americans' attitude alike on technical and legal grounds, and on the broader ground of patriotism. Examine this view.

5. Describe the changes made by North's Regulating Act of 1773 in the composition and administration of the East India Company. How did this act affect the position of Warren Hastings?

6. The nature of Pitt the Younger was far better suited to the decade of reconstruction than to that of revolution. Discuss.

7. Summarize the history of the Church of England during the reign of George III. How do you account for the rapid growth of dissent during this period?

8. Give a short account of the career and character of Charles Fox.

9. Discuss Napoleon's plan of commercial warfare against Great Britain, and account for its failure.

10. Show how the Anglo-Irish Union failed either to conciliate Ireland or promote its prosperity. To whom was the blame of this due?

### THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Attempt FIVE questions only, of which at least ONE and not more than TWO must be from each group.*

*All questions are of equal value.*

#### GROUP A.

1. Tell the story of India's resistance to the Greek invasions and examine in this connexion the accuracy of the remark that 'the great political events which affected India during the ancient period did not call forth popular action in the sense in which the repulse of the Persian attacks on Greece evoked the history of Herodotus.'

2. Give a brief account of the attempts at Indian political unity during the period 325 B.C. to A.D. 400. Do you notice any difference between the political ideals of the third century B.C. and fourth century A.D. respectively?

3. What justification is there for regarding the struggles of the Post-Gupta period as 'merely wars of crows and kites, in which no deep significance could lie'?

4. Give a brief account of self-governing institutions in Ancient India with special reference to those flourishing in the Chola Empire in the days of Parāntaka I and his successors.

#### GROUP B.

5. Give a critical estimate of the character and career of Alau-ddin Khiliji with special reference to the evidence of Ibn Batuta and Ziauddin Barni.

6. Point out the importance of the Raichur Doab in the history of the Deccan during the sixteenth century A.D.

7. How far was the greatness of Akbar really due to (a) his predecessors, and (b) contemporary soldiers and statesmen?

8. Describe the part played by women in shaping the destinies of India during the period A.D. 1550-1700.

## GROUP C.

9. Make a comparative estimate of the ideals and methods of Shivaji and Guru Govind Singh.

10. Review the foreign policy of the British government in India during the period A.D. 1818-48. To what extent was the policy justified?

11. Trace the evolution of Council government in British India.

12. Institute a comparison between the principles of government followed by Lytton and Ripon.

## FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer FOUR questions only.*

*The questions are of equal value.*

1. Describe the condition of Greece at the end of the Persian Invasion. To what do you ascribe the Greek triumph? How far had the Greeks any conception of national unity?

2. It is said that only a willingness to admit Greeks of other states into citizenship would have saved Athens once she began to extend her dominion. Examine this statement.

3. What were the difficulties in the way of exercising sea-power in the Greece of the fifth century B.C.?

4. After the Persian failure 'Lacedaemon had not the means, and the Lacedaemonian government had not the brains or the spirit to create the means, of carrying out an effective imperial policy.' Discuss this statement.

5. Describe the functions and discuss the value of the Athenian Ecclesia. How far was the Athenian system of government effective for meeting the difficulties that Athens had to face in the middle of the fifth century?

6. Write brief notes on any seven of the following:—the Peiraeus, the Ionic Revolt, the Athenian expedition to Egypt, Brasidas, Sphacteria, the Greek colonies in Sicily, Decelea, the battle of Arginusae, demes, the rule of the Thirty at Athens, the relations between Athens and Corinth.

7. Give some account of the leading writers of your period. From what other sources than these writers is our knowledge of the age derived?

## FIFTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer FIVE questions.*

*All questions carry equal marks.*

1. Discuss the view that the victory of Rome in the First Punic War was due more to the errors of her enemies than to any other causes.

2. 'Never was the noble struggle of man with fate waged more nobly than by Hamilcar Barca.' Discuss.

3. Give a critical estimate of the causes that led to the failure of Hannibal in Italy.

## 4. Explain and criticize the following :—

'Rome emerged from the Punic War with such changes in the character of her ruling classes and of the masses of her people, that to the clear-sighted the elements of decay were visible in the very hour of her greatness.'

5. Review Mommsen's estimate of Publius Scipio.

6. Discuss the political condition of the eastern countries on the eve of the second Macedonian War. Illustrate your answer by a sketch-map.

7. 'Philip was not the man whom Macedonia at that time required; yet his gifts were far from insignificant.' Discuss.

8. Discuss the system of administration of the Roman provinces.

9. Give a critical account of trade, industry, and agriculture in ancient Rome. Discuss in this connexion the evils of 'capitalism' and 'slavery.'

10. 'Roman religion was a faith of little spiritual value, and afforded no scope for religious movements or pious fanaticism.' Discuss.

## SIXTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer Question 9 and any FOUR of the rest.*

*All questions are of equal value.*

1. 'Charles the Great (Charlemagne) transferred the theocratic idea of absolute sovereignty to the Frankish State. He prepared the way for the social institutions peculiar to the middle ages' (SERLIGER).

Elucidate the above. Describe Charlemagne's organization of his empire and account for its fall.

2. The Norman Conquest has been called a blessing in disguise for the English people. Justify this view by a survey of the organization of the administration and national defence, the condition of the church, and the state of society in England under Norman rule as contrasted with the Anglo-Saxon period. What were the peculiar gifts of the Norman race?

3. It has been said that the Holy Roman Empire was neither holy, nor Roman, nor an empire. Comment on the saying, and explain the basic idea of this institution and its inherent weakness.

4. Describe the internal organization and problems of the republic of Florence. How did despots come to power in the Italian cities?

5. Study the reign of Louis XI (of France) with special reference to (a) his foreign dealings, and (b) his real services to France.

6. By what steps and for what reasons did the Popes acquire supreme political power over Rome and a portion of Italy? What were their advantages in their contest with the emperors?

7. Give a short account of the state of trade, industries, the fine arts and learning in the Moorish kingdom of Spain, with a note on the medieval trade routes.

8. The Byzantine empire is sometimes said to have been unjustly disparaged. Criticize this view, dwelling on the general character of this empire, its achievements, and the causes of its downfall.

9. Write a short essay on Feudalism—how it arose among Germanic races—its different aspects in England and France—'a school of moral discipline' (HALLAM)—its political consequences—the causes of its decline.

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## FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Six questions to be attempted.*

*All questions are of equal value.*

1. Draw a map to show the European dominions of Charles V. Explain how they had fallen into his possession.
2. Discuss the political influence of the Reformation upon France.
3. What were the aims of Charles XII of Sweden? Account for his failure. Illustrate your answer with a map.
4. Explain the importance of the following treaties as marking stages in the decline of the Turkish power, and illustrate with a map :—Carlowitz, Kutchak-Kainardji, London.
5. Trace the expansion of Prussia from the accession of the Great Elector to the death of Frederick William I. Illustrate your answer by a map.
6. Compare the motives by which the participators in the partitions of Poland were actuated, and show by means of a map the share of the spoil that accrued to each.
7. Explain the efforts made by Turgot to avert the French Revolution, and account for his failure.
8. Sketch briefly the share of Austria in the wars of the period 1789-1815.
9. Explain Napoleon's policy of mediatization. How was it carried out, and how did it affect the future of Germany?
10. Draw a map to illustrate the political condition of Italy in 1815, and briefly trace the process of the unification of the country.
11. What was the 'Ausgleich' (1866)? Describe the composition of Joseph II's empire at this time, and illustrate your answer by a map.
12. Trace the history of the Balkan States from 1878 to the Peace of Bucharest. Illustrate your answer by a map.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only FIVE questions are to be answered.*

*The questions are of equal value.*

1. Estimate the influence of the writings of Bolingbroke and Burke on the development of party principles and party organization in England during the reign of George III.



2. Discuss the extent of the personal influence of the crown over the government and its policy under King George III.

3. Summarize the steps taken by the British Parliament during the reign of George III to strengthen the control of the Crown over the conduct of Indian affairs.

4. Explain the constitutional importance of the career of John Wilkes.

5. 'No nobler figure ever stood in the forefront of a nation's life.' Explore the truth in this estimate of the character and career of George Washington.

6. Compare the character and powers of the Cabinet in the days of Newcastle and the younger Pitt respectively.

7. Trace the course of events in Ireland which led to the Rebellion of 1798. What were the main problems of Irish administration in the days of the younger Pitt?

8. Estimate the importance of English sea-power in the wars of the time of George III.

9. Discuss the accuracy of the statement that Castlereagh inherited and fulfilled the political tradition of the younger Pitt.

10. Give an account of British colonial enterprise in the reign of George III, with special reference to the part played by James Cook.

### THIRD PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Six questions to be attempted. From each section at least ONE question should be answered.*

*The questions are of equal value.*

#### A.

1. Describe the nature of the civilization of India in the Mauryan period.

2. 'The Gupta period is in the annals of classical India almost what the Periclean age is in the history of Greece.' Justify this remark.

3. Give an account of Harshavardhana and his times.

4. Describe the raids of Mahmud of Ghazni, and estimate their results.

#### B.

5. What account of the Vijaynagar dynasty is preserved in the writings of contemporary European travellers?

6. Give a brief account of the reign of Firoz Tughlaq and enumerate the principal causes of the downfall of the Pathan Empire.

7. Whom do you regard as the greatest Muhammadan Emperor? Give reasons for your answer.

8. Describe Sivaji as a man, conqueror, and ruler.

#### C.

9. Give an account of the European struggle for supremacy in India in the seventeenth and eighteenth centuries, and explain why the English of all the European nations were able to be successful.

10. Describe the foreign policy of Lord Minto (1807-1818).

11. Explain and comment on (a) balance of power, (b) non-intervention policy, and (c) subsidiary system.

12. Describe the causes and after-effects of the Mutiny of 1857.

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## FIRST HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*The questions are of equal value.*

1. What is 'consumer's surplus'? Discuss the criticisms that have been levelled against it.
2. 'Value is determined by marginal utility.' 'Value is determined by cost of production.' Discuss these statements carefully bringing out the importance of the time element in the theory of value.
3. What do you understand by 'unearned increment'? It is desirable that it should be taxed? Discuss the difficulties in the way of taxing it.
4. Carefully examine the effects of—(a) improved methods of cultivation, and (b) reduction in cost of transport on the rent of land.
5. 'Wages tend to be equal to the net marginal product of labour.' Carefully discuss this statement.
6. State carefully the essentials of a good banking system. Discuss the necessity of such a system for the commercial prosperity of a nation.
7. Explain carefully how the rate of discount influences (a) the prices of securities, and (b) the foreign exchanges.
8. Discuss the causes that are held to be responsible for crises. Carefully examine the methods suggested to prevent them.
9. What do you understand by 'invisible exports' in the balance of indebtedness between two countries? Illustrate your answer by concrete examples in the case of any two countries.
10. State and critically examine the 'quantity theory of money.'

## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Attempt only FIVE questions.*

*The questions are of equal value.*

1. State the principles and methods of the distribution of powers between the central and local governments in a federal system.

What, if any, is the nature of control exercised by the central government over the local governments in such a system?

2. Give a definition of 'State' as a concept in political science. Is this concept the same as that used in 'International Law'?

Is the League of Nations a State?

3. State the fundamental ideas of—

(a) the social contract theory;

(b) the organic theory of the State.

Point out the elements of truth in each of these theories.

4. Bring out the distinction between *legal* and *political* sovereignty. Illustrate this distinction by reference to England and the United States of America.

5. Discuss the relation between the executive and the legislative organs of the State.

What are the powers vested in the executive organ?

6. What are the nature, constitution, and functions of the Administrative Courts in France?

Indicate their chief merits.

7. State the nature and extent of administrative and legislative control exercised by the Crown and the King in Parliament over Indian administration and legislation.

What are the legislative powers of the Governor-General?

8. Contrast the main features of the presidential and the parliamentary forms of government.

Is the system of government in France parliamentary or presidential? Give your reasons.

9. Discuss the necessity and justification of the party system in a democracy. What are its principal merits and defects?

10. Write a short essay not exceeding *eighty* lines on *communal representation* in India.

## THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Attempt FIVE questions.*

*All questions are of equal value.*

1. Briefly describe the geographical distribution of the population of India, and analyse the causes that determine it.

2. What are the economic effects of the joint family system in India? Suggest methods by which its defects can be eliminated while retaining its good features.

3. Describe the means by which the Indian cultivator can be enabled to obtain higher prices for his products. What would be the effect on the rent which he would pay to his landlord?

4. Estimate the importance of cottage industries in the rural economy of India. Discuss the ways and means of making them more efficient.
5. Examine the effects of the permanent settlement of land revenue in Bengal. How has it affected the incidence of taxation as a whole? Can you suggest any remedy for its evils?
6. Would you advocate borrowing foreign capital to develop the natural resources of India? Discuss the relative merits and defects of the system.
7. What are the main defects of the present currency position of India? What measures would you suggest to remedy them? Give reasons.
8. Enumerate and comment upon the main items of expenditure and the chief sources of revenue of the Government of India. Are you satisfied with the allocation of the heads of revenue between the Central and Provincial Governments?
9. Explain the organization of co-operative credit societies in India, and describe their progress in Bengal.
10. Clearly explain the advantages of rural co-operative credit societies in India.

#### FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any six questions.*

*The questions are of equal value.*

1. Define wealth and discuss its relationship with welfare.
2. What are the institutions which may be regarded as the foundation of the existing economic order?
3. Neither consumers nor labourers have any share in the conduct of industry at present.  
Examine this charge against the capitalistic organization of industry.
4. What is the explanation of the fact that society does not consistently or in right quantities produce the articles that it needs most?
5. Explain with the help of diagrams the equilibrium of the forces of demand and supply in determining price.
6. Why are some occupations overcrowded with consequent low earnings and some under-staffed with consequent high earnings?
7. Write notes on:—the bank rate, median, incidence of taxation, fiduciary issue, purchasing power parity.
8. Compare the advantages of gold and paper for serving as the money commodity in a country.
9. State the case for stabilization of the value of money.
10. Why do modern states rely more on direct than on indirect taxes for raising their revenues?
11. If you are to regulate the activities of banks by law, what laws would you make?

#### FIFTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Any five questions to be answered.*

*The questions are of equal value.*

1. Examine, with special reference to the views of Aristotle, the statement that Greek democracy was a close aristocracy with relation to the total population of the state.

2. Give and appraise Aristotle's argument on the subject of Communism.
3. How does Aristotle classify democracies, and how far have his views on the different qualities of democracies been borne out by history?
4. Examine Aristotle's argument leading to his answer to the question whether the virtue of the good man is the same as that of the good citizen.
5. Examine John Stuart Mill's views on the criteria of a good form of government. Compare his views with those of Aristotle.
6. What, in Aristotle's view, are the chief causes of revolutions, and what does he consider to be the best method of avoiding them?
7. Examine John Stuart Mill's views on instructed representation.
8. Examine John Stuart Mill's views on the effects of 'sinister interests' on representative government. What are the chief methods used by modern democracies to overcome such effects?
9. Compare the views of Aristotle and John Stuart Mill on the place of education in the state.

### SIXTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Write an essay on any one of the following subjects :—

100

- (a) Indian poverty : its causes and remedies.
- (b) Foreign capital : its use and abuse.
- (c) Dominion status for India *versus* complete independence.
- (d) Subject peoples and the right of self-determination.

### ECONOMICS

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## FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*The questions are of equal value.*

1. Comment on the following :—'Economic laws are essentially hypothetical' (SELIGMAN).
2. Consider whether the following should be regarded as capital :—(a) a surgeon's skill, (b) savings accumulated in the form of a deposit at a savings bank, (c) Government of India War Loan, (d) money in circulation
3. Indicate the advantages of large-scale production.
4. How is value determined under conditions of (a) monopoly, and (b) competition?
5. In what different ways is it possible to combine gold and silver in the currency system of a country?
6. 'While changes in the price level.....influence the rate of interest, it must not be forgotten that on the other hand changes in the rate of interest itself affect the general price level' (SELIGMAN). Discuss this statement.
7. In what sense is it true that imports must in the long run pay for exports?
8. How far is it true to say that the theory of wages is an application of the general theory of value?
9. Is it possible to abolish or to mitigate poverty by checking population?
10. Define a tax. Explain and illustrate Adam Smith's first canon of taxation.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer FIVE questions. At least TWO must be answered from each group.*

*The questions are of equal value.*

## GROUP A.

1. Criticize the social contract theory of the origin of the State.
2. 'The safety of the State is its first law, and to realise this end it must be above morality.' Comment on the statement.
3. How far should the State undertake social reform?
4. What arguments from political theory would you use in supporting or rejecting (a) communal representation, and (b) compulsory education?
5. Discuss briefly the recent changes in the conception of Sovereignty.

## GROUP B.

6. Discuss the use and limitations of the party system. Answer with special reference to the conditions in the Indian Assembly.
7. Discuss the position of the Cabinet in England. To what extent has the Cabinet usurped the functions of Parliament?

8. Examine briefly the case for (a) functional, and (b) territorial representation in the modern state.

9. Examine clearly the mutual relations of the Viceroy, the Executive Council and the Assembly in India.

10. Why is there special danger in India of the instruments of democratic control being captured and engineered by powerful interests?

### THIRD PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The questions are of equal value.*

*Answer any six questions.*

1. Discuss the economic effects of the joint family and caste systems in India. Would you advocate the abolition of these systems? Give reasons for your answer.

2. What are in your opinion the defects and difficulties of Indian agriculture? What steps would you suggest for their removal?

3. What do you mean by the monsoons in India? Describe the various economic consequences which follow from their failure.

4. State the salient features of the Permanent and Temporary settlements in India, and discuss their merits and defects.

5. What led to the enactment of the Co-operative Societies Act of 1912? In what respects has this Act been an improvement upon the Co-operative Credit Societies Act of 1904?

6. State some of the striking economic and social effects that have followed from the construction of railways in India. Do you think that any further extension of the Indian railway system is desirable?

7. Describe the chief features of India's foreign trade, and account for the normal excess of her exports over her imports.

8. Do you think that it will be in the best interests of India that she should now be included in any scheme of Imperial Preference? Give reasons for your answer.

9. Examine the arguments for and against the use of foreign capital in India.

10. Write notes on any three of the following :—

- (a) Council drafts.
- (b) Reverse drafts.
- (c) The gold exchange standard.
- (d) Unlimited liability.
- (e) The Co-operative Agricultural Sale Society.

### MENTAL AND MORAL PHILOSOPHY

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### FIRST HONOURS PAPER

#### PSYCHOLOGY.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any FIVE questions.*

*The questions are of equal value.*

1. In what sense is psychology a science? What is the distinction between psychology and the physical sciences? How is psychology related to education?
2. What are the difficulties of introspection as a method of psychology, and how are we to overcome them? Can objective observation or experiment take the place of the introspective method?
3. 'Consciousness does not terminate with sharp edges which mark it off definitely and finally from the nonconscious.' Discuss fully the implications of this statement.
4. Describe the structure of the eye. Explain and examine the physiological theories of light-sensation as formulated by Helmholtz and Hering.
5. 'All the conscious processes of an individual enter as factors into the determination of his subsequent conscious activities.' Discuss this with special reference to the different forms of imagination.
6. What is the nature of attention? How do you distinguish between involuntary and voluntary attention? What are the conditions of development from the one to the other?
7. What is meant by 'action in the line of greatest resistance'? What light does it throw on the nature of voluntary action?
8. Write explanatory notes on:—(a) perceptual-reflex, (b) after-image, (c) ideo-motor action, (d) apperception, (e) behaviour.

### SECOND HONOURS PAPER

#### ETHICS.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer FIVE questions only.*

*The questions are of equal value.*

1. Are there any universal principles of morality? How does the possibility or otherwise of such principles affect the position of Ethics as a science?



2. Distinguish between *customs, laws, manners, and fashions*, and show their relation to morality.

3. Discuss the formula 'greatest happiness of the greatest number.' Do you consider unequal distribution of wealth to be consistent with this formula?

4. How is the Individual related ethically to the Government of his country? What, in your opinion, are the limits of obeying the laws of one's country?

5. What do you understand by a Sanction? What is the sanction by which a man is restrained (a) from committing a murder, (b) from vulgarity and bad manners, (c) from desiring the downfall of a rival?

6. Analyse the feeling of Indignation, and estimate its moral value.

7. Distinguish between Legal and Moral Responsibility. Discuss the question whether, and how far, moral responsibility attaches to (a) mad actions, (b) drunken excesses, (c) criminal acts due to inherited moral dispositions.

8. Do you consider the maxim 'virtue is its own reward' a sufficient principle of morality? Discuss the question with special reference to the connexion, if any, between virtue and happiness.

### THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any FIVE questions.*

*The questions are of equal value.*

1. Discuss the definition of Philosophy as 'the science of all interpretations of the world' (MARVIN), and show how far it serves to determine the province of Philosophy and its relation to Epistemology.

2. Explain what you understand by Idealism and Realism as theories based on the analysis of experience. Review critically the statement that the 'historical importance of Berkeley rests on the fact that he made epistemological idealism the basis for metaphysical idealism' (PAULSEN).

3. Expound and examine the views of Space and Time as (a) 'entities,' (b) 'forms of perception,' and (c) abstract notions.

4. Is Matter a percept or a concept of the human mind? Elucidate briefly the theories, regarding the constitution of Matter, formulated by modern physical science.

5. Examine the position that Evolution is not a *cause* but a *method*, and, as such, compatible alike with Mechanism and Teleology. How would you justify the contention that 'there is no opposition whatever between the mechanical explanation and the idealistic interpretation as such' (PAULSEN)?

6. Develop the distinction between Emergent and Repetitive evolution. How does Bergson's creative evolution bear on this problem?

7. Is Panpsychism the necessary consequence of the Parallelistic theory? Give a critical estimate of the arguments *for* and *against* Panpsychism. On what grounds is it contended that 'it is a problem for science rather than for metaphysics' (MARVIN)?

8. Discuss fully the bearing of the theories of Transcendence and Immanence on the relation of God to man. How would you view the claims of Pluralism in this context?

## FOURTH HONOURS PAPER.

## NATURAL THEOLOGY.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any FIVE questions.*

*The questions are of equal value.*

1. Is religious consciousness an original psychosis? Discuss the question by referring to the problem how far it has an instinctive basis or a spontaneous origin in the nature of human consciousness.

2. Has the doctrine of creation any sound philosophical justification? Does the denial of creation in time necessarily imply the atheistic position?

3. What is the special object of the Moral Argument for the existence of God?

Would it make any difference in the resulting conception of God if the moral nature of man were to disappear entirely?

4. *Either*, Briefly outline the theistic view *either* of Spinoza, *or* of Leibnitz, *or* of Kant, and discuss how far it is an adequate conception of the nature of God.

*Or*, Discuss critically how far the doctrine of the relativity of knowledge implies the unknowability of God.

5. If you believe that the world is governed by any purpose, adduce evidence in support of your belief. If you do not, give reasons for your answer.

6. *Either*, Science and Religion are supposed to be antagonistic to each other. What is the basis of this conflict? Does the advancement of science necessarily involve the decay of religious faith?

*Or*, Give a brief outline of the Positivistic view of religion, and discuss the question whether in any respect a religion of Humanity fails to satisfy a genuine religious need.

7. Does the existence of evil or of human freedom necessarily imply the finitude of God? If it does not, then attempt a reconciliation of both with the infinity of God.

8. Explain the following terms clearly:—deism, meliorism, acosmism, phenomenalism, pluralism.

## FIFTH HONOURS PAPER.

## HISTORY OF PHILOSOPHY.

*Candidates are required to give their answers in their own words as far as practicable.*

*Only FIVE questions are to be attempted.*

*All the questions are of equal value.*

1. Explain fully the meaning of Descartes's principle, *Cogito ergo sum*. How far did Descartes succeed in remaining true to this principle?

2. Fully discuss Spinoza's conception of substance. Show that the defects of Spinoza's philosophy are all traceable to the defects of this conception.

8. Indicate the position of Hobbes in the history of philosophy, noticing especially his relation (a) to Bacon, (b) to Descartes.

4. Locke's *Essay on the Human Understanding* has been called the English 'Critique of Pure Reason.' How far is this title justified?

5. *Either*, Is Berkeley's philosophy a form of occasionalism? Fully discuss this question.

*Or*, Is the ethical teaching of Spinoza consistent with his metaphysics?

6. Give a brief sketch of the growth of empiricism from Bacon to Hume.

7. *Either*, Show how Leibnitz's problem may be looked upon as that of reconciling the principle of individuality with that of continuity.

*Or*, 'A monadism, if it is consistently logical, is necessarily atheistic.' How far do you accept this view?

8. 'How are synthetic judgments *a priori* possible?' What does Kant mean by stating the problem of the *Critique of Pure Reason* in this manner.

9. Is the standpoint of the *Critique of Practical Reason* inconsistent with that of the *Critique of Pure Reason*? Fully discuss this question.

### SIXTH HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer Questions 6 and 7 and any other THREE.*

*The figures in the margin indicate full marks.*

1. Give a critical exposition of Locke's theory of substance. 15
2. Examine the value of Descartes's criterion of truth. 15
3. Expound Spinoza's theory of final causes. 15
4. What use does Leibnitz make in his system of the doctrine of pre-established harmony? 15
5. Briefly outline Kant's metaphysical deduction of the categories. 15
6. How does Descartes formulate the ontological argument? Estimate its value. 15
7. Write an essay on any *one* of the following subjects :— 40
  - (a) Freedom and causality.
  - (b) The place of the unconscious in human behaviour.
  - (c) Religious experience and its validity.

### PHILOSOPHY—PASS

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## FIRST PASS PAPER.

## PSYCHOLOGY.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*The questions are of equal value.*

1. What do you understand by psychology? How is it related to physiology? Is it possible to reduce psychology to physiology, or make it quite independent of physiology?

2. What are the principal methods of psychological investigation, and how do they co-operate to build up the science of psychology?

3. What are the ultimate elements of our mental life, and how are they related to one another?

Examine in this connexion the truth of the statement: 'If any one of the three species of conscious elements is to be regarded as the original form of consciousness, it must evidently be the will.'

4. Describe the structure and functions of the human brain in relation to mental life. Explain and examine the phrenologists' localization of mental functions.

5. Distinguish between stimulus and sensation. How do variations in the intensity of stimulus correspond to those of sensation? Give some experimental facts and examine the Weber-Fechner law on this point.

6. Analyse the emotions of fear and anger, love and hate, pointing out their characteristic differences in expression.

7. What do you understand by voluntary action? How is it conditioned in its origin and development by habit, instinct, and emotion?

8. Write explanatory notes on:—(a) sensation-reflex, (b) reaction-time, (c) inhibition, (d) assimilation, (e) complication.

## SECOND PASS PAPER.

## ETHICS.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer six questions only.*

*The questions are of equal value.*

1. What place in ethics would you assign to unconscious actions? Are actions done from habit to be judged morally?

2. Discuss the doctrine of evolution in its application to morality, and show how far it has affected the principles of ethics.

3. Analyse the concept of the moral self, and discuss self-realization as the highest ethical end.

4. Distinguish between legal right and moral right. 'It may not always be right to do what one has a right to do.' Explain and discuss.

5. Are there 'conflicting duties'? Discuss the question with special reference to how conflicting moral rules are dealt with (a) by Intuitionism, (b) by Utilitarianism.

6. On what ethical grounds would you condemn (a) an act of suicide, (b) Antonio's contract with Shylock as regards the pound of flesh?

7. 'Moral obligation is founded on the belief that virtue is enjoined by the command of God.' Explain and discuss.

8. Estimate the value of Kant's categorical imperative as a criterion of moral life.

### THIRD PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*The questions are of equal value.*

1. Discuss the definition of philosophy as 'the sum total of scientific knowledge,' and indicate the relation in which philosophy stands to science.

2. 'Epistemology is a critical reflection on metaphysics.' Explain in the light of the above the relation of epistemology to philosophy, and the function of criticism as a method of philosophical knowledge.

3. What do you understand by a category of knowledge? Explain fully the nature of causality as a category.

4. State what appears to you to be the truth of the principle of Conservation of Energy. Is its validity determined *a priori* or *a posteriori*? Determine the meaning of Correlation in this context.

5. Show how far the species-idea is modified by the concept of Evolution. What are the main points at issue between mechanical and teleological evolution?

6. What, in your opinion, is the relation between Mind and Body? Examine critically the different theories bearing on this problem.

7. Develop the implications of the idea of the Absolute, and show that it is not necessarily inconsistent with the idea of God.

8. Write explanatory notes on the following :—(a) Social self, (b) Ethos, (c) *Sub specie aeternitatis*.

# B.A. and B.Sc. Examinations

1931

## MATHEMATICS—HONOURS

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### FIRST HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Full marks for any SEVEN questions.*

1. If  $C_r$  denote the coefficient of  $x^r$  in the expansion of  $(1+x)^n$ . show that

$$1^3.C_1^2 + 2^3.C_2^2 + 3^3.C_3^2 + \dots + n^3.C_n^2 = \frac{n^2(n^2-1)(2n-3)!}{\{(n-1)!\}^2}.$$

2. If  $n$  be any integer, prove that

$$\left\{ \frac{n(n+1)^3}{8} \right\}^n > (n!)^4.$$

The four quantities  $a, b, m, n$  being supposed positive, show that unless  $a$  and  $b$  are equal,

$$(ma + nb)^{m+n} > (m+n)^{m+n} a^m b^n.$$

3. Test the convergency of the series

$$\frac{x}{2} + \frac{1.3}{2.4} \frac{x^3}{6} + \frac{1.3.5.7}{2.4.6.8} \frac{x^5}{10} + \frac{1.3.5.7.9.11}{2.4.6.8.10.12} \frac{x^7}{14} + \dots$$

Shew that the series whose general term is  $u_n$  is convergent or divergent, according as

$$\lim_{n \rightarrow \infty} \left( n \log \frac{u_n}{u_{n+1}} \right) > 1, \text{ or } < 1.$$

4. If  $s_n$  denote the sum to  $n$  terms of the series

$$1.3.2^2 + 2.4.3^2 + 3.5.4^2 + \dots$$

and  $\sigma_n$  that of the series

$$\frac{1}{1.2.3.4} + \frac{1}{2.3.4.5} + \frac{1}{3.4.5.6} + \dots$$

show that

$$540s_n\sigma_n - 30\sigma_n + 18n(2n+3) = 0.$$

5. If  $p_n/q_n$  denote the  $n$ th convergent to a continued fraction, prove that

$$p_n q_{n-1} - p_{n-1} q_n = (-1)^n.$$

Show that the difference between the first and  $n$ th convergents is numerically equal to

$$\frac{1}{q_1 q_2} - \frac{1}{q_1 q_3} + \frac{1}{q_2 q_4} - \dots + (-1)^n \frac{1}{q_{n-1} q_n}.$$

6. Prove that

$$(i) \quad \begin{vmatrix} (b+c)^2 & a^2 & a^2 \\ b^2 & (c+a)^2 & b^2 \\ c^2 & c^2 & (a+b)^2 \end{vmatrix} = 2abc(a+b+c)^3.$$

$$(ii) \quad \begin{vmatrix} 1 & 2 & 3 & 4 \\ 2 & 3 & 4 & 5 \\ 3 & 4 & 5 & 6 \\ 4 & 5 & 6 & 7 \end{vmatrix} = 0.$$

7. Prove that between every pair of consecutive real roots of a rational integral equation  $f(z)=0$ , there is an odd number of real roots of the equation  $f'(x)=0$ .

Show that the equation  $x^5 - 5px^3 + 2q = 0$ , will have three real roots, provided  $27p^5 > q^2$ .

8. Find the equation whose roots are the squares of the roots of the equation

$$a_0 x^n - a_1 x^{n-1} + a_2 x^{n-2} - \dots + (-1)^n a_n = 0.$$

The equation whose roots are the squares of the roots of the cubic

$$x^3 - ax^2 + bx - 1 = 0$$

is found to be identical with this cubic. Prove that

$$\text{either (i) } a=b=0, \quad \text{or (ii) } a=b=3,$$

$$\text{or (iii) } a \text{ and } b \text{ are the roots of } x^2 + x + 2 = 0.$$

9. Find the criteria of the nature of the roots of the cubic

$$ax^3 + 3bx^2 + 3cx + d = 0.$$

Hence prove that the equation

$$2x^3 + 3ax^2 + 6a^2x + b = 0$$

has only one real root.

10. Find Euler's cubic for the biquadratic equation

$$ax^4 + 4bx^3 + 6cx^2 + 4dx + e = 0,$$

and prove that :

(i) when the roots of the biquadratic are all imaginary, the roots of Euler's cubic are real, two being negative and one positive;

(ii) when the biquadratic has two real and two imaginary roots, Euler's cubic has two imaginary roots and one real positive root.

11. (i) Find all the roots of the equation

$$x^4 + x^3 - 2x^2 + 4x - 24 = 0.$$

- (ii) Find the real root of

$$x^3 + x + 1 = 0$$

correct to three decimal places.

## SECOND HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Candidates are required to attempt SEVEN questions only, of which not more than FOUR are to be selected from the same group.*

## GROUP A.

1. Determine the value of
- $\lambda$
- for which the equation

$$ax^2 + by^2 + 2gx + 2fy + 2\lambda xy = 0$$

will represent a pair of right lines and prove that one of the lines is the tangent at the origin to the curve

$$ax^2 + by^2 + 2gx + 2fy + 2\lambda xy = 0$$

for any value of  $\lambda$ .

If  $\alpha$  and  $\beta$  are the angles which a line makes with the co-ordinate axes, prove that

$$\cos^2 \alpha + \cos^2 \beta - 2 \cos \alpha \cos \beta \cos \omega = \sin^2 \omega,$$

the axes being inclined at an angle.

2. Prove that the transformation of rectangular axes which converts

$$\frac{X^2}{p} + \frac{Y^2}{q} \text{ into } ax^2 + 2hxy + by^2 \text{ will convert } \frac{X^2}{p-\lambda} + \frac{Y^2}{q-\lambda} \text{ into}$$

$$\frac{ax^2 + 2hxy + by^2 - \lambda(ab - h^2)(x^2 + y^2)}{1 - (a+b)\lambda + (ab - h^2)\lambda^2}.$$

The vertices of a triangle lie on the lines

$$y = x \tan \alpha, y = x \tan \beta, y = x \tan \gamma,$$

the circumcentre being at the origin. Show that the locus of the orthocentre is the line

$$x(\sin \alpha + \sin \beta + \sin \gamma) - y(\cos \alpha + \cos \beta + \cos \gamma) = 0.$$

3. Find the equation of the director circle of the conic

$$(ax + by - 1)^2 = 2kxy;$$

and prove that for different values of  $k$ , the director circles are coaxial.

4. Show that the area of a triangle whose sides touch the ellipse

$$x^2/a^2 + y^2/b^2 = 1 \text{ at the points } \phi_1, \phi_2, \phi_3 \text{ is}$$

$$ab \tan \frac{1}{2}(\phi_1 - \phi_2) \tan \frac{1}{2}(\phi_2 - \phi_3) \tan \frac{1}{2}(\phi_3 - \phi_1).$$

Prove that the locus of a point from which two tangents to the ellipse make equal angles with the line

$$y = x \tan \theta \text{ is the rectangular hyperbola}$$

$$x^2 - 2xy \cot 2\theta - y^2 = a^2 - b^2.$$



5. Transform the equation of the conic

$$x^2 + 4y^2 - 2x - 16y + 1 = 0$$

to its principal axes, and give a rough sketch of the curve.

Find also the *eccentricity* of the conic.

6. Obtain the equation of a parabola, referred to two tangents, inclined at an angle
- $\omega$
- , as axes, in the form

$$\sqrt{ax} + \sqrt{\beta y} = 1.$$

Show that the focus of the parabola is given by the equations  $x/a = y/\beta = x^2 + 2xy \cos \omega + y^2$ .

7. If the co-ordinates of a point on the hyperbola
- $xy = c^2$
- are represented by
- $x = ct$
- ,
- $y = c/t$
- , prove that the normals at the four points
- $t_1, t_2, t_3, t_4$
- will be concurrent if
- $\sum t_1 t_2 = 0$
- and
- $t_1 t_2 t_3 t_4 = -1$
- .

Prove that the polar of any point on an asymptote of a hyperbola with respect to the hyperbola is parallel to that asymptote.

## GROUP B.

8. If
- $A + B + C = \pi$
- , prove that

$$\begin{vmatrix} \sin^2 A & \cot A & 1 \\ \sin^2 B & \cot B & 1 \\ \sin^2 C & \cot C & 1 \end{vmatrix} = 0.$$

If  $\theta$  and  $\phi$  satisfy the equation

$$\sin \theta + \sin \phi = \sqrt{3} (\cos \phi - \cos \theta),$$

show that

$$\sin 3\theta + \sin 3\phi = 0.$$

9. Eliminate
- $\theta$
- from the equations

$$x \sin \theta + y \cos \theta = 2a \sin 2\theta,$$

$$x \cos \theta - y \sin \theta = a \cos 2\theta.$$

Solve the equation

$$\cos^{-1}(x + \frac{1}{2}) + \cos^{-1}x + \cos^{-1}(x - \frac{1}{2}) = \frac{1}{2}\pi.$$

10. Given that the sides of a triangle are in A. P. and the greatest angle exceeds the least by
- $90^\circ$
- , show that the sides are as

$$\sqrt{7}+1 : \sqrt{7} : \sqrt{7}-1.$$

If the centre of the in-circle be equidistant from the centre of the circum-circle and the orthocentre, prove that one angle of the triangle is  $60^\circ$ .

11. If the roots of the equation
- $ax^2 + bx + c = 0$
- be imaginary, show that the co-efficient of
- $x^n$
- in the development of
- $(ax^2 + bx + c)^{-1}$
- in powers of
- $x$
- is

$$\frac{a^{\frac{1}{2}} \sin (n+1) \theta}{c^{\frac{1}{2}+1} \sin \theta},$$

where  $\theta$  is given by  $b \sec \theta + 2\sqrt{ac} = 0$ .

12. Reduce
- $\tan^{-1} (\cos \theta + i \sin \theta)$
- to the form
- $a + ib$
- , and hence show that

$$\cos \theta - \frac{1}{3} \cos 3\theta + \frac{1}{5} \cos 5\theta - \dots = \pm \frac{\pi}{4},$$

the upper or lower sign being taken, according as  $\cos \theta$  is positive or negative.

13. Establish *either* of the expansions

$$\tan z = 8z \sum_1^{\infty} \frac{1}{(2m-1)^2 \pi^2 - 4z^2},$$

$$\cot z = \frac{1}{z} + 2z \sum_1^{\infty} \frac{1}{z^2 - r^2 \pi^2}.$$

Prove that

$$\left(1 + \frac{2}{1+1^2} + \frac{2}{1+2^2} + \frac{2}{1+3^2} + \dots\right) \times$$

$$\left(\frac{1}{4+1^2} + \frac{1}{4+3^2} + \frac{1}{4+5^2} + \dots\right) = \frac{\pi^2}{8}.$$

14. Factorize

$$x^{2n} - 2x^n \cos \theta + 1$$

Show that the sum of the series

$$1 - \frac{1}{2} \cos \theta + \frac{1 \cdot 3}{2 \cdot 4} \cos 2\theta - \frac{1 \cdot 3 \cdot 5}{2 \cdot 4 \cdot 6} \cos 3\theta + \dots \text{ is } \frac{\cos \frac{1}{2} \theta}{\sqrt{2} \cos \frac{1}{2} \theta}.$$

where  $\theta$  lies between  $\pm \pi$ .

### THIRD HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Candidates are expected to answer SIX questions, of which only FOUR are to be selected from GROUP A and the rest from GROUP B.*

#### GROUP A.

1. Ascertain analytically the conditions

- (i) that four points, whose Cartesian co-ordinates are known, may lie in a plane; and  
 (ii) that four planes, whose Cartesian equations are known, may meet at a point.

Verify that the four points

$$(1, 1, 1), (a, b, c), (a^2, b^2, c^2), (a^3, b^3, c^3)$$

are coplanar, whenever the four planes

$$x + y + z = 1,$$

$$ax + by + cz = 1,$$

$$a^2x + b^2y + c^2z = 1,$$

$$a^3x + b^3y + c^3z = 1$$

pass through a common point, and conversely. Finally show that the requisite condition in either case is that at least two of the quantities

$$1, a, b, c$$

be equal.

2. Investigate the shortest distance between the two right lines

$$\frac{x-a}{l} = \frac{y-\beta}{m} = \frac{z-\gamma}{n}$$

and

$$\frac{x-a'}{l'} = \frac{y-\beta'}{m'} = \frac{z-\gamma'}{n'},$$

Find the shortest distances between the following three lines, taken in pairs :

$$\frac{x-1}{5} = \frac{y+1}{7} = \frac{z-1}{2},$$

$$\frac{x-2}{3} = \frac{y+2}{10} = \frac{z-2}{7},$$

and

$$\frac{x-3}{2} = \frac{y+3}{7} = \frac{z-3}{5};$$

and verify that the three shortest distances coincide in position.

3. Obtain the condition that the cone

$$ax^2 + by^2 + cz^2 + 2fyz + 2gzx + 2hxy = 0$$

may admit three mutually perpendicular generators. How would you interpret the condition if the cone were improper?

Show that the cone

$$5yz - 8zx + 3xy = 0$$

contains a triad of orthogonal generators, one of which is

$$\frac{x}{1} = \frac{y}{2} = \frac{z}{3}.$$

Also find the equations to the other two lines forming the triad.

4. Find the condition that the plane

$$lx + my + nz + p = 0$$

may touch the paraboloid

$$\frac{x^2}{a^2} - \frac{y^2}{b^2} = \frac{2z}{c}.$$

The condition of tangency being taken for granted, prove that the section of the surface made by the plane consists of two right lines, parallel respectively to the two planes

$$\frac{x}{a} + \frac{y}{b} = 0$$

and

$$\frac{x}{a} - \frac{y}{b} = 0.$$

5. Given the conicoid (S)

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1,$$

prove that an infinity of tangents can be found having the same fixed direction-cosines ( $l, m, n$ ) and that these trace out the locus

$$\left( \frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} - 1 \right) \left( \frac{l^2}{a^2} + \frac{m^2}{b^2} + \frac{n^2}{c^2} \right) = \left( \frac{lx}{a^2} + \frac{my}{b^2} + \frac{nz}{c^2} \right)^2.$$

Prove further that the points of contact of the above set of parallel tangents with the quadric ( $S$ ) are situated in that particular plane, which contains the mid-points of all chords of  $S$  drawn parallel to the direction ( $l, m, n$ ).

6. For the ellipsoid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1, (a > b > c);$$

prove that the only real circular sections are those whose planes are of the forms

$$\frac{x}{a} \sqrt{a^2 - b^2} \pm \frac{z}{c} \sqrt{b^2 - c^2} = \lambda,$$

where  $\lambda$  is an arbitrary constant.

Express the radius ( $R$ ) of any of the circular sections in terms of the associated value of  $\lambda$  and examine when and how  $R$  vanishes. Hence locate the four real umbilics of the quadric.

7. Show that a hyperboloid of one sheet possesses two distinct systems of generators, which are so constituted that no two lines of the same system intersect at a point, whereas lines of opposite systems never fail to intersect.

Construct the equations of the two generating lines ( $PQ, PR$ ), which pass through an arbitrary point  $P$  on the hyperboloid

$$x^2 + y^2 - z^2 = 1,$$

and verify that, for  $PQ, PR$  to be at right angles to each other, the necessary and sufficient condition is that  $P$  should be at a unit distance from the centre of the surface.

8. Define the principal radii of curvature ( $\rho_1, \rho_2$ ) belonging to an arbitrary point ( $x, y, z$ ) on the surface

$$z = f(x, y),$$

and form the algebraic quadratic, whose roots are  $\rho_1$  and  $\rho_2$ .

By general reasoning or by any other process, justify the following observations :—

(i) At every point on a sphere,  $\rho_1 = \rho_2$ .

(ii) At every point on a cone except the vertex, either  $\rho_1$  or  $\rho_2$  is infinite.

#### GROUP B.

9. Determine the vector drawn from the origin to the centre of mass of a system of particles, whose (scalar) masses as well as positional vectors are assigned.

There are  $n$  particles of masses

$$a, a+b, a+2b, a+3b, \dots, a+(n-1)b$$

placed respectively at the terminals of the  $n$  vectors

$$\alpha, \alpha+\beta, \alpha+2\beta, \alpha+3\beta, \dots, \alpha+(n-1)\beta,$$

emanating from a common origin  $O$ . Prove that the vector joining  $O$  to the

mass-centre of the particles is of form

$$a + c\beta,$$

where  $c$  denotes the scalar

$$\frac{n-1}{3} \times \frac{3a + (2n-1)b}{2a + (n-1)b}.$$

10.  $a, \beta, \gamma$  are known to be three vectors, drawn from a common origin and resolved along three orthogonal unit vectors ( $i, j, k$ ) in the forms

$$a = il_1 + jm_1 + kn_1,$$

$$\beta = il_2 + jm_2 + kn_2,$$

$$\gamma = il_3 + jm_3 + kn_3.$$

Calculate the full analytical expression for the quaternionic product  $a\beta\gamma$ , and note particularly the scalar and vector constituents.

Deduce or prove independently that the quaternion  $a\beta\gamma$  will reduce to a pure vector or to a pure scalar, according as  $a, \beta, \gamma$  are coplanar or mutually rectangular.

11. Resolve an arbitrary vector  $\rho$  along three non-coplanar vector ( $a, \beta, \gamma$ ), and also along

$$(V\beta\gamma, V\gamma a, V\alpha\beta).$$

If the scalar equations

$$S\alpha\rho = S\beta\rho = S\gamma\rho = 1$$

hold simultaneously, prove that  $\rho$  is given by

$$\rho = \frac{V\beta\gamma + V\gamma a + V\alpha\beta}{S\alpha\beta\gamma}.$$

Can you simplify this value of  $\rho$  on the hypothesis that  $a, \beta, \gamma$  are perpendicular unit vectors?

12. Define the terms angle, plane, and tensor with reference to a quaternion given in the form

$$q \equiv \frac{\beta}{\alpha}.$$

and compare these elements with those of a second quaternion, viz.,

$$p \equiv \frac{\beta\delta}{\alpha}.$$

Given that the quaternions  $\frac{\beta}{\alpha}$  and  $\frac{\delta}{\gamma}$  are equal in all respects,

prove the following consequences:

- (i) Each of the scalar expressions  $S\alpha\beta\gamma, S\beta\gamma\delta, S\gamma\delta\alpha, S\delta\alpha\beta$  is nil.
- (ii) The angle between  $\alpha$  and  $\beta$  equals that between  $\gamma$  and  $\delta$ .
- (iii)  $T\alpha : T\beta = T\gamma : T\delta$ .

[N.B.—The symbols  $\alpha, \beta, \gamma, \delta$  denote vectors.]

## FOURTH HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*You are required to attempt the FIFTH and EIGHTH questions; full marks may be obtained by answering these questions and any FOUR of the remaining questions.*

1. State carefully what you understand by the limit of a function  $f(x)$  for  $x=a$ . Consider the question of the existence of

$$\lim_{x \rightarrow 0} \cos \frac{1}{x} \quad \text{and} \quad \lim_{x \rightarrow 0} \frac{1}{2 + e^{\frac{1}{x}}}.$$

Trace the curve

$$y = \lim_{n \rightarrow \infty} \frac{x^{2n} \sin \frac{\pi x}{2} + x^2}{x^{2n} + 1},$$

and discuss whether  $y$  is continuous at the points  $x = \pm 1$ .

2. Find the equation to the normal to a curve whose equation is given in polar co-ordinates.

Prove that the normal to the curve

$$r^2 = a^2 \cos 2\theta$$

at the point  $\theta = \alpha$  meets a perpendicular normal at a joint whose distance from the origin is

$$2^{-1} \cdot 3^{\frac{1}{2}} \cos \frac{1}{2} \left( 2\alpha \pm \frac{\pi}{6} \right).$$

3. (i) Trace the curve

$$y^2(x-2a) + x^3 = 0;$$

- (ii) Find the area of the loop of the Conchoid of Nicomedes,

$$r = a \sec \theta \pm b, \quad 0 < a < b.$$

4. Prove carefully the mean-value theorem :

$$f(b) - f(a) = (b-a)f'(c), \quad a < c < b.$$

Examine the following cases for determining the validity of the theorem, in each case  $a$  being equal to  $-1$  and  $b$  equal to  $1$  :

$$(i) \quad f(x) = x^{\frac{1}{2}},$$

$$(ii) \quad f(x) = x^{\frac{2}{3}},$$

$$(iii) \quad f(x) = x \cos \frac{1}{x}.$$

5. Prove that the values of a variable  $x$  which give to  $f(x)$  a maximum or minimum value are among the roots of the equation  $f'(x) = 0$ ; and determine the further conditions necessary to distinguish the values of  $f(x)$ , corresponding to the roots of  $f'(x) = 0$ , as maxima, minima, or neither maxima nor minima.

Find the maxima and minima of the function

$$\frac{(x+2)^2}{(x+6)^2}.$$

6. (i) By considering the expression

$$[f(x+a, y+b) - f(x+a, y) - f(x, y+b) + f(x, y)]/ab$$

obtain conditions in which

$$\frac{\partial}{\partial x} \left( \frac{\partial f}{\partial y} \right) = \frac{\partial}{\partial y} \left( \frac{\partial f}{\partial x} \right)$$

(ii) If  $\xi^2 = (x-a)^2 + y^2$ ,  $\eta^2 = x^2 + (y-b)^2$ , show that

$$\frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} = \frac{\partial^2 u}{\partial \xi^2} + \frac{\partial^2 u}{\partial \eta^2} + \frac{\xi^2 + \eta^2 - a^2 - b^2}{\xi\eta} \frac{\partial^2 u}{\partial \xi \partial \eta} + \frac{1}{\xi} \frac{\partial u}{\partial \xi} + \frac{1}{\eta} \frac{\partial u}{\partial \eta}.$$

7. Defining a definite integral as the limit of a sum, prove that integration is the reverse of differentiation in the case of every continuous function.

Show that the limit of the product

$$\left(1 + \frac{1}{n}\right) \left(1 + \frac{2}{n}\right)^{\frac{1}{2}} \left(1 + \frac{3}{n}\right)^{\frac{1}{3}} \dots \left(1 + \frac{n-2}{n}\right)^{\frac{1}{n-2}} \left(1 + \frac{n-1}{n}\right)^{\frac{1}{n-1}} \left(1 + \frac{n}{n}\right)^{\frac{1}{n}}$$

when  $n$  is increased indefinitely is  $e^{n^2/12}$ .

8. Integrate any three of the following :

$$\frac{x}{x^2+1}, \quad x \sin^2 x \cos^2 x, \quad \frac{1}{4+5 \cos x}, \quad \frac{1}{\sin^2 x}, \quad \frac{\log(\log x)}{x}.$$

9. Evaluate the following,  $m$  and  $n$  being positive integers :

$$\int_0^{\frac{\pi}{2}} \cos^m \theta \sin^n \theta d\theta, \quad \int_0^1 \frac{(1-x)^{n-1}}{(x^2-2x+2)^m} dx, \quad \int_0^{\pi} \theta \sin^2 \theta d\theta.$$

10. (i) Find a sine series for values of  $x$  between 0 and  $\pi$  to represent  $x^2$  from  $x=0$  to  $x=\frac{\pi}{3}$ , zero from  $x=\frac{\pi}{3}$  to  $x=\frac{2\pi}{3}$ , and

$(\pi-x)^2$  from  $x=\frac{2\pi}{3}$  to  $x=\pi$ .

(ii) Solve  $x^2 \frac{d^2 y}{dx^2} - 2y = x$ .

11. Solve any two of the following differential equations :

$$(i) (1-x^2) \frac{dy}{dx} + x^2 y = x^2 (1-x^2).$$

$$(ii) \frac{d^2 y}{dx^2} + 2 \frac{dy}{dx} - 3y = e^x.$$

$$(iii) \frac{d^2 x}{dt^2} + \mu^2 x = \cos nt.$$

12. (i) Find all the curves in which the radius of curvature is proportional to the radius vector.

(ii) Prove that the ellipses

$$b^2x^2 + a^2y^2 = a^2b^2$$

and

$$a^2x^2 \sec^2 \alpha + b^2y^2 \operatorname{cosec}^2 \alpha = (a^2 - b^2)^2$$

are so related that the envelope of the second for different values of  $\alpha$  is the evolute of the first.

### FIFTH HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Six questions may be attempted, THREE from each group.*

#### GROUP A.

1. If all the forces in a coplanar system are rotated about their points of application through the same angle in their own plane, prove that their resultant always passes through a fixed point, and determine the co-ordinates of that point.

If a body be in a position of equilibrium under the action of a system of coplanar forces whose magnitudes and directions are given, show that the equilibrium is stable or unstable according as the *Virial* of the system is positive or negative in the position of equilibrium.

2. Find in Cartesian co-ordinates the equation to the curve in which a heavy uniform string hangs when suspended from two points.

Four pegs are placed at the corners of a rectangle  $ABCD$ ,  $AB$  being horizontal and of length  $2a$ ,  $BC$  being vertical and of length  $b$ ; over them an endless uniform string is hung, forming two catenaries between  $A$  and  $B$ , and  $C$  and  $D$ . If the tangents at  $A$  and  $D$  make angles  $\alpha$  and  $\beta$  with the horizontal, prove that

$$\cos \alpha \log \cot \left( \frac{\pi}{4} - \frac{\alpha}{2} \right) \sim \frac{a}{b} \cos \beta \log \cot \left( \frac{\pi}{4} - \frac{\beta}{2} \right) = b.$$

3. A flat heavy circular disk, the weight of which is supposed to be equally distributed over its area, lies on a rough inclined plane and can turn about a pin in its circumference, show that it will rest in any position if

$$32\mu > 9\pi \tan i,$$

where  $i$  is the inclination of the plane to the horizon.

4. Find the centre of gravity of (i) the area bounded by the axis of  $y$ , the cycloid

$$\left. \begin{aligned} x &= a(\theta + \sin \theta) \\ y &= a(1 - \cos \theta) \end{aligned} \right\},$$

and its base; and (ii) the area enclosed between  $y^2 = ax$  and  $x^2 = by$ .

5. Enunciate the Principle of Virtual Work; and deduce the equations of equilibrium of a body acted on by a system of coplanar forces, viz.

$$\sum X = 0, \sum Y = 0 \text{ and } \sum (xY - yX) = 0.$$

Find, by Virtual Work, the position of equilibrium of a straight uniform heavy rod of length  $2a$  resting against a smooth vertical wall and over a smooth peg at a distance  $c$  from the wall.



## GROUP B.

6. Deduce expressions for the radial and cross-radial acceleration of a particle moving on a plane.

Find (i) the differential equation of the path of the particle if the cross-radial acceleration vanishes at every point of the path and the radial acceleration is a function of the position of the particle; and (ii) the acceleration of the particle when it describes an equilateral hyperbola under a force from the centre.

7. If  $m$  be the mean anomaly of a planet,  $\phi$  its eccentric anomaly, and  $e$  the eccentricity of its orbit, prove that

$$m = \phi - e \sin \phi.$$

Prove that the time average of the kinetic energy of a planet is equal to the value of the kinetic energy of the planet at the end of the minor axis of its orbit.

8. Find the motion of a heavy particle down a rough cycloid whose axis is vertical and vertex lowest.

If the particle starts from rest at the cusp of the cycloid and comes to rest at the vertex in the above case, show that

$$\mu = e^{-\mu\pi/2}.$$

9. Enunciate the Principle of Energy, and verify it for a particle moving on a smooth plane curve under external forces.

A particle falls from rest at infinity towards the earth; show that its velocity on reaching the surface of the earth is the same as it would have acquired in falling with constant acceleration  $g$  through a distance equal to the earth's radius.

10. Several heavy particles are projected in different directions in vacuo from a given point of earth's surface, the magnitude of the velocities of projection being  $V$ . Prove that (i) at any particular instant the particles will lie on a sphere, and (ii) they can never proceed beyond a certain paraboloid of revolution of latus rectum  $2V^2/g$ .

[ $g$  is supposed to be constant at all positions of the projectiles.]

## SIXTH HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Six questions may be attempted, THREE from each group.*

## GROUP A.

1. Prove that the surfaces of equal density and the surfaces of equal pressure are coincident in any liquid in equilibrium under a conservative system of forces.

A thin uniform metallic spherical shell is filled with water. A small circular part is cut out at a point below the top of the shell and fixed to it at the highest point of the aperture by a hinge. If the shell and the water have equal weights, show that no water can escape unless the angle subtended at the centre of the aperture and the top of the shell at its centre be greater than  $\cos^{-1} \frac{2}{3}$ .

2. Define *centre of pressure*, and find the centre of pressure of a triangular area whose base is on the free surface of a homogeneous liquid. How will this centre be altered if the area be rotated about the base?

A masonry wall, the vertical section of which is a right-angled

triangle with the right angle at the horizontal bottom, separates two water levels on the vertical and the slant side. Find the resultant pressure and centre of pressure on unit length of the wall. How will this centre change if the level on the slant side rises?

3. Two equal and similar rods  $AB, BC$ , fixed at an angle  $\alpha$  at  $B$  float with this point outside in a liquid of twice the specific gravity of the rods. If the bisector of the angle between the rods makes an angle  $\theta$  with the horizon show that

$$\cos 2\theta + \sec \alpha = 2.$$

4. Obtain the law of variation of density with height of a gaseous atmosphere at constant temperature and in equilibrium under gravity.

A tumbler made out of thin sheet metal of total volume  $v$  and specific weight  $\sigma'$  is forced down with the opening downwards in a liquid of

specific weight  $\sigma$ . Show that after a depth  $h$   $\left\{ \frac{V\sigma}{v(\sigma' - \sigma)} - 1 \right\}$

below the surface of the liquid has been reached by the top of the tumbler equilibrium is to be maintained by a vertical pull upwards,  $V$  being the volume of the interior of the tumbler supposed large compared to  $v$  and  $h$  the height of the barometer of the liquid at its surface.

5. If a body of density  $\sigma$  be weighed on a Nicholson's hydrometer in air of density  $s$  by means of weights of density  $B$ , show that the apparent weight  $w$  of the body is to be corrected for the density of the air by

$$W_B \frac{s}{\sigma - s}.$$

Define the metacentre of a floating body, and explain its importance in the theory of its stability.

#### GROUP B.

6. What are the usual co-ordinates for locating the position of a heavenly body and represent them on the celestial sphere? State which of these co-ordinates are fixed and which variable for a star and the sun in their diurnal motions.

Show that the apparent diurnal path of a star projected on the plane of the horizon at latitude  $\phi$  is an ellipse of eccentricity  $\cos \phi$ .

7. Explain clearly the causes of the seasons.

Explain, with the help of diagrams, how the length of the day at a particular station on a given date can be calculated. Where is the length constant throughout all the year?

8. Enunciate Kepler's laws. How can they be verified?

The interval between two successive conjunctions of Mercury is 115.9 days, and that between two successive oppositions of Saturn is 1028.6 days. Calculate the ratio of the distance of Mercury and Saturn from the sun.

9. What is aberration of a star, and how would you represent it on the celestial sphere? Describe and explain its effect on the apparent position of the star.

10. Write a short essay on any one of the following :—

- (i) Parallax of heavenly bodies.
- (ii) Eclipses of the Sun and the Moon.
- (iii) The transit instrument.

## MATHEMATICS—PASS

<i>Paper-Setters—</i>	{	MR. MANMATHANATH RAY, M.A.
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		„ HEMCHANDRA SENGUPTA, M.A.
		„ TARAKNATH BHATTACHARYYA, M.Sc.
		„ UPENDRANATH RAY, M.A.
		„ MANORANJAN GUPTA, M.A.
		„ SURENDRANATH SEN, M.A.
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## FIRST PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*You are not permitted to attempt more than SEVEN questions which carry full marks, and not more than FOUR from the same group.*

*All the questions are of equal value.*

## GROUP A.

1. (i) If  $A + B + C = 180^\circ$ , prove that

$$\cos A + \cos B + \cos C = 1 + 4 \sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2}.$$

(ii) Express  $\cos 5\theta$  in terms of  $\cos \theta$ .

2. (i) If  $r, r_1, r_2, r_3$  be the radii of the inscribed and escribed circles of triangle, show that

$$\frac{1}{r} = \frac{1}{r_1} + \frac{1}{r_2} + \frac{1}{r_3}.$$

(ii) Prove that in any triangle, the area of the inscribed circle is to the area of the triangle as  $\pi$  is to

$$\cot \frac{A}{2} \cot \frac{B}{2} \cot \frac{C}{2}.$$

3. Solve :

$$(i) \tan^{-1} \frac{1}{8} + \tan^{-1} \frac{1}{5} + \tan^{-1} \frac{1}{7} + \tan^{-1} x = \frac{\pi}{4};$$

$$(ii) 2 \sin^2 x + \sin^2 2x = 2.$$

4. (i) Find the sum of the sines of a series of angles which are in A.P.

(ii) Find the sum of  $n$  terms of the series

$$\sin^3 \alpha + \sin^3(\alpha + \beta) + \sin^3(\alpha + 2\beta) + \dots$$

5. (i) Prove De Moivre's Theorem for an integral index.

(ii) Find all the values of

$$(1-i)^{1/2}.$$

6. (i) Expand  $\cos$

$\theta$  in ascending powers of  $\theta$ .

(ii) Obtain an expansion of

$\theta$  in powers of  $\tan \theta$ .

7. (i) Given  $\sin x = n \sin$

$(x + \alpha)$ , obtain an expansion of  $x$  in powers of  $n$ .

(ii) Reduce  $\cos$

$(\theta + \phi i)$  to the form of  $a + \beta i$ .

#### GROUP B.

1. (i) Show how to transform from polar co-ordinates to rectangular co-ordinates and *vice versa*.

(ii) Transform to Cartesian co-ordinates the equation

$$r(\cos 3\theta + \sin 3\theta) = 5k \sin \theta \cos \theta.$$

2. (i) Show that any equation of the first degree in  $x$  and  $y$  always represents a straight line.

(ii) Find the equation to the straight line drawn at right angles to the straight line.

$$\frac{x}{a} - \frac{y}{b} = 1$$

through the point where it meets the axis of  $x$ .

3. (i) Find the angle between the straight lines given by

$$ax^2 + 2hxy + by^2 = 0.$$

(ii) Find the angle between the lines joining the origin to the points common to

$$3x^2 + 5xy - 3y^2 + 2x + 3y = 0,$$

and

$$3x - 2y = 1.$$

4. (i) Find the equation of the circle which is described on the line joining the points

$(x_1, y_1)$  and  $(x_2, y_2)$  as diameter.

(ii) Find the equation of the circle which touches the axes at  $(0, 1)$  and  $(1, 0)$ .

5. (i) Obtain the equation of the normal to the parabola

$$y^2 = 4ax \text{ in the form}$$

$$y + mx = 2am + am^3.$$

(ii) Find the equation to the chord of a parabola which is bisected at the point  $(h, k)$ .

6. (i) Find the equation of the line joining two points on the ellipse

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1,$$

whose eccentric angles are given.

(ii) Find the condition that  $(x', y')$  and  $(x'', y'')$  may be the extremities of a pair of conjugate diameters of the ellipse

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1.$$

7. (i) Show that the area of the parallelogram formed by the tangents at the ends of conjugate diameters of the hyperbola

$$\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$$

is constant.

(ii) Show that the portion of a tangent to a hyperbola intercepted between the asymptotes is bisected at the point of contact.

## SECOND PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

SEVEN questions carry full marks, of which THREE must be from GROUP A and FOUR from GROUP B.

### GROUP A.

1. (i) Define the following terms:—variable, dependent variable, infinitesimal, and limiting value.

(ii) If the area of a circle increase at a uniform rate show that the rate of increase of the perimeter varies inversely as the radius.

2. Find  $\frac{dy}{dx}$  when

(i)  $ax^2 + 2hxy + by^2 + 2gx + 2fy + c = 0$ ;

(ii)  $y = a(1 - \cos t)$ ,  $x = a(t + \sin t)$ ;

(iii)  $y = (\sin x)^x$ .

3. If  $y = \tan(m \tan^{-1} x)$ , show that

$$(1 + x^2) \frac{dy}{dx} = m(1 + y^2),$$

and prove that the first three terms in the Maclaurin series for  $y$  are

$$mx + m(m^2 - 1) \frac{x^3}{3} + m(m^2 - 1)(2m^2 - 3) \frac{x^5}{3 \cdot 5}.$$

4. (i) Prove that

$$\tan \phi = \frac{x \frac{dy}{dx} - y}{x + y \frac{dy}{dx}},$$

where  $\phi$  is the angle which the tangent to a curve makes with the radius vector drawn from the origin.

(ii) If  $\lim_{x \rightarrow 0} \frac{\sin 2x + a \sin x}{x^3}$  be finite, find the value of  $a$  and the limit.

5. Find the pedal equation of the parabola

$$y^2 = 4a(x + a).$$

Show that the chord of curvature through the focus of the parabola is four times the focal distance of the point.

## GROUP B.

6. If  $\phi(x) + \frac{d}{dx}\{\psi(x)\}$ , prove that

$$\lim_{h \rightarrow 0} h \{\phi(a) + \phi(a+h) + \phi(a+2h) + \dots + \phi(b)\} = \psi(b) - \psi(a).$$

Deduce that

$$\lim_{n \rightarrow \infty} \left\{ \frac{1}{n} + \frac{1}{n+1} + \frac{1}{n+2} + \dots + \frac{1}{n+n-1} \right\} = \log 2.$$

7. Integrate

$$(i) \frac{1}{(x^2+a^2)(x^2+b^2)}; (ii) \frac{\cos 2x}{\cos x}; (iii) \frac{1}{\sqrt{x^2+x-2}}.$$

8. Show that

$$(i) \int_a^b \frac{\log x}{x} dx = \frac{1}{2} \log \left( \frac{b}{a} \right) \log(ab);$$

$$(ii) \int_0^a \sin^{-1} \frac{2t}{1+t^2} dt = 2a \tan^{-1} a - \log(1+a^2).$$

9. Find the intrinsic equation of the curve for which the length of the arc measured from the origin varies as the square-root of the ordinate. Also obtain the Cartesian co-ordinates of any point on the curve in terms of any parameter.

10. If  $s$  be the length of the curve

$$r = a \tanh \frac{\theta}{2}$$

between the origin and  $\theta = 2\pi$ , and  $A$  the area between the same points, show that  $A = a(s - a\pi)$ .

11. (i) Prove that if the angle between the tangent and the radius vector is one-half the vectorial angle  $\theta$ , the curve is the cardioid

$$r = a(1 - \cos \theta).$$

(ii) Prove that if the subnormal bears a constant ratio to the abscissa, the curve is a conic. Determine the particular conic which passes through (1, 1).

12. Solve :

$$(i) \frac{d^2y}{dx^2} - 7\frac{dy}{dx} + 12y = 0;$$

$$(ii) (1-x^2)\frac{dy}{dx} - xy = 1;$$

$$(iii) (x^2 - y^2)\frac{dy}{dx} = 2xy.$$

## THIRD PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Any six questions carry full marks.*

1. (i) Define—'perfect fluid,' 'density,' 'specific gravity,' 'fluid pressure at a point.'

(ii) Describe Bramah's hydraulic press, enunciating the hydrostatic principle which is utilized in it. Is it practicable to multiply the effort indefinitely?

2. (i) A closed hollow vessel is in the shape of a right circular cone with a base which is horizontal and downwards: water is poured into it through a small hole at the vertex till the vessel is full. Find the pressure at any point of the base and show that the total pressure on the base is three times the weight of the water contained, if the atmospheric pressure be neglected.

(ii) If a parallelogram be immersed in any manner in a homogeneous liquid, prove that the sum of the pressures at the extremities of each diagonal is the same.

3. (i) If a surface (which is such that no vertical line cuts it in more than one point) be in contact with fluid at rest under gravity, show that the resultant vertical thrust is equal to the superincumbent fluid and acts through the centre of gravity of the superincumbent fluid.

(ii) A right circular cylinder is just immersed in water with its axis horizontal. Compare the vertical thrusts on the two parts of the curved surface into which it is divided by the horizontal plane through the axis.

4. (i) Write down the conditions of equilibrium of a body floating under the action of gravity alone.

(ii) A body is weighed, by means of a spring balance, in air and in water and its apparent weights are found to be  $W_1$  and  $W_2$  respectively. Find its true weight if the specific gravity of air be  $s$ .

5. (i) Establish the relation  $p^V \propto T$  (for a gas) where  $T$  is the absolute temperature.

(ii) The constants  $\kappa_1$  and  $\kappa_2$  denote the values of  $\kappa$  in the formula  $p = \kappa p$  for two gases. Given masses  $m_1$  and  $m_2$  of the first and the second gas are mixed at the same temperature. Prove that the value of the constant  $\kappa$  for the mixture is

$$\frac{m_1 \kappa_1 + m_2 \kappa_2}{m_1 + m_2}.$$

6. How would you find the specific gravity of a solid which is lighter than water with the help of a hydrostatic balance? How would you proceed if the solid melts in or reacts chemically with water?

7. (i) Define—'celestial meridian,' 'prime vertical,' 'celestial latitude of a star,' 'hour angle of a star,' 'solstitial colure.'

(ii) If a certain star cross the meridian at 11 o'clock p.m. to-night, at what o'clock will it cross the meridian (1) to-morrow night, (2) 15 days hence, assuming the sun's change of R.A. to be uniform.

(iii) Show that the altitude of the celestial pole at any place is equal to the latitude of the place.

(iv) At what part of the earth would a body have no deviation towards the east when let drop from a height? Give reasons for your answer.

8. (i) Given the zenith distances of a circumpolar star at its upper and lower transits, obtain formulae for the latitude of the place and the star's declination.

If the star in one of its transits souths, what change would you suggest in your formulae?

(ii) Find the latitude of a place where the greatest elevation of the sun above the horizon at midsummer is  $76^{\circ} 42'$ .

9. (i) Prove that the refraction of a heavenly body, the temperature and pressure being constant, varies as the tangent of the apparent zenith distance. Does the formula hold at the horizon or near the horizon? Give reasons for your answer.

(ii) Attempt an explanation of the oval shapes of the sun and moon when near the horizon.

10. What is 'twilight'? What is its cause? Prove that it depends on the latitude of the place and the declination of the sun. How does the duration of twilight at a given place alter with the seasons of the year?

Show that if

$$l + \delta = \text{or } > 72^{\circ} \text{ twilight lasts all night.}$$

11. What is the 'precession of the equinoxes'? Explain its causes. What would be the effect of a uniform precession on the celestial pole? Is the precession uniform? Who first discovered its true nature?

12. (i) What is the equation of time? What is it due to? Show that it vanishes four times a year.

(ii) Given mean time = 3 h. 20 m. 50 s. p.m. when the right ascension of the mean sun at mean noon is 16 h. 32 m. 9 s., find sidereal time.

## PHYSICS—HONOURS

Paper-Setters— (Pass and Honours.)	{	PROF. C. V. RAMAN, M.A., Ph.D., D.Sc., F.R.S., N.L.
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## THEORETICAL

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## FIRST HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Not more than THREE questions to be attempted from each group.*

*All questions are of equal value.*

## GROUP A.

1. Explain the principle by which complex waves can be resolved into simple harmonic motions. A string is plucked aside at its middle point and released. Find an expression for the different harmonic vibrations into which its motion can be resolved.



2. Show that in the case of a reversible pendulum the following relation holds :—

$$\frac{4\pi^2}{g} = \frac{T_1^2 + T_2^2}{2(h_1 + h_2)} + \frac{T_1^2 - T_2^2}{2(h_1 - h_2)},$$

where  $g$ ,  $T_1$ ,  $T_2$ ,  $h_1$ ,  $h_2$ , have their usual significance. State clearly how  $g$  can be determined to a high degree of precision by means of such a pendulum.

3. Express Young's modulus and Poisson's ratio for an isotropic solid in terms of volume, elasticity and rigidity.

Give an experimental method to determine any one of the above coefficients when the solid is a thick circular rod.

4. Write a note on the nature of capillary forces.

Deduce an expression for the ascent of liquid placed between two parallel plates, and show in what respects it differs from the ascent of the same liquid in a capillary tube.

5. Show that the volume of a liquid passing across any cross section of a pipe of diameter  $d$  in unit time is

$$\frac{\pi}{128} \cdot \frac{d^4}{\eta} \cdot \frac{P_1 - P_2}{l},$$

where  $P_1$ ,  $P_2$  are the pressures at the ends of the pipe,  $l$  the length of the pipe, and  $\eta$  the coefficient of viscosity of the liquid.

What is the effect of temperature on the viscosity of liquids and gases?

### GROUP B.

6. Give the theory underlying the production of dust figures in Kundt's tube, stating some of the precautions that are necessary for the success of the experiment. State how this method has been utilized for the determination of one of the physical constants of gases.

7. Give examples of sound vibrations maintained by periodic communication of heat. State clearly at what phase the heat supply ought to be communicated to the vibrating system.

8. Discuss the modes of vibration of a rectangular plate supported at its centre.

9. The vibration microscope has been used to investigate the form of vibrations of strings. State clearly how the observed figures are actually interpreted.

### SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Six questions to be attempted.*

*The questions are of equal value.*

1. Give a short account of the different methods used in the measurement of low temperatures.

2. How would you experimentally determine the specific heat of a gas at constant volume?

3. Describe the method of determining the specific heat of a liquid by the method of cooling, and justify the assumptions on which the method is based.

4. Describe any experimental plant for producing liquid air. Write notes on any point of theoretical interest in the working of the machine you describe.

5. Deduce from the kinetic theory an expression of the specific heat of a non-atomic gas at constant pressure. Is there any theoretical basis for assuming that the molar heat of a gas will generally increase with the complexity of the molecule?

6. Prove that all substances which expand on solidification will have their freezing-points lowered by an increase of pressure.

Calculate the lowering of the freezing-point of water per atmosphere increase of pressure, taking the latent heat of ice to be 80, the specific volume of ice being 1.087, and that of water at 0°C. being unity.

7. Explain how it is possible to define an absolute temperature scale independent of any special property of any particular thermometric substance.

8. Define thermal conductivity.

The internal and external surfaces of a long hollow circular cylinder are kept at fixed temperatures  $T_1$  and  $T_2$ . Show that the quantity of heat which flows per second across a length  $l$  of the cylinder will be

$$Q = \frac{2\pi kl(T_1 - T_2)}{\log\left(\frac{r_2}{r_1}\right)},$$

where  $r_1$  and  $r_2$  are the internal and the external radii of the cylinder, and  $k$  the conductivity of the material.

9. How would you proceed to show that heat radiation can be regarded as invisible light waves of longer wave-lengths than red light?

### THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Not more than six questions to be attempted.*

*All questions are of equal value.*

1. Write a critical note on the experimental determinations of the velocity of light.

2. Explain the phenomena observed at the boundary of the shadow cast by a straight edge. Illustrate your answer by diagrams and state the source of light you would choose and its position in order that the effects may be most clearly observed.

3. Describe a modern astronomical refracting telescope, and explain with diagrams the purpose served by each of its component parts. What influence has the aperture of the instrument on its optical performance?

4. Deduce the law of refraction of light in passing from a denser to a rarer medium on the principles of the wave-theory, and examine the case of total reflection in some detail.

5. What are the Fraunhofer lines in the solar spectrum? Explain what they indicate regarding the physical and chemical constitution of the sun.

6. The image of the sun reflected at the surface of a calm sheet of water is viewed by an observer who holds a Nicol's prism in front of his eye and rotates it about its axis. Describe what he would notice for different altitudes of the sun.

7. What is optical rotatory power? Give some illustrative remarks regarding the phenomenon. How is it explained?

8. What are the common defects in vision? Explain fully how they are determined and corrected by optical aid.

9. Describe, in full detail, giving the theory, some practical application of interferometry in either science or the arts.

#### FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only six questions to be attempted.*

*All questions are of equal value.*

1. A point charge  $e$  is placed at a distance  $r$  from the centre of a sphere of positive charge of constant volume density  $\rho$  and radius  $a$ . Find expressions for the force acting on the charge where (i)  $r > a$ , and (ii)  $r < a$ .

2. You are required in a certain experiment to measure a range of currents varying from  $10^{-1}$  amperes to  $10^3$  amperes. State what different kinds of apparatus you would use, and explain why you choose them, and how they work.

3. Give a short account of the changes in resistances produced in substances under the action of (a) heat, (b) light, (c) magnetic field. Give some practical application of these effects. Indicate briefly how these effects can be accounted for.

4. Describe a suspended coil galvanometer of the ballistic type.

A coil has 50 turns each of area 2 sq. cm.; and it gives a deflexion of a spot of light of 10 mm. per micro-ampere on a scale one metre from the scale. Find the couple required to twist the suspension through one radian. The coil moves in a uniform field of 2,000 C.G.S. units.

5. A condenser of capacity  $c$  is discharged through a coil of inductance  $L$  and resistance  $R$ . Discuss the condition under which the discharge is oscillatory. How can you experimentally show that such discharges give rise to electro-magnetic waves?

6. Explain a method of determining the charge on the electron.

7. Define the terms 'intensity of a magnetic field,' 'permeability,' and 'ampere turns.' Calculate the intensity of the field at the central point of a solenoid of small diameter 100 cm. long, wound with 6,000 turns of wire and traversed by a current of 5 amperes.

8. Prove that in a circuit carrying alternating current the mean rate of the work can be expressed as  $\frac{1}{2} E_0 I_0 \cos \theta$ , where  $E_0$ ,  $I_0$  are the virtual volts and amperes and  $\theta$  is the phase difference between the current and E.M.F.

9. What is the co-efficient of mutual induction? Describe some method by which it can be experimentally determined.

## PHYSICS—PASS

Examiners—	{	MR. RADHIKAMOHAN CHAUDHURI, M.A.
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		„ PRAMODCHARAN SEN, M.Sc.
		„ ABINASCHANDRA SAHA, M.Sc.
		„ AMARESCHANDRA CHAKRABARTI, M.Sc.

## FIRST PASS PAPER

*At least ONE question to be answered from each of the GROUPS A, B, and C, and not more than six in all.*

*Candidates are required to give their answers in their own words as far as practicable.*

*The questions are all of equal value.*

## A

1. Explain what is meant by (a) a field of force, and (b) potential. How can a field of force be mapped out from a knowledge of the distribution of potential in it? Give an account of the different kinds of potential with which you are familiar.

2. What is the gravitational constant, and how can it be experimentally determined? In what way is the gravitational force different from the other kinds of force which act between material bodies?

3. A flat disk is drawn through a liquid with its surface (a) perpendicular, and (b) parallel to its direction of motion. Discuss the nature of the resistances offered to the motion of the disk in the two cases.

Describe a method of measuring the coefficient of viscosity of a liquid.

## B

4. In a mercury thermometer, as well as in a constant-pressure air thermometer, temperature is measured by the change in volume of the indicating substance.

Explain why for all standard measurements a gas thermometer is always preferred. Describe Callendar's form of constant-pressure air thermometer.

5. What are isothermal and adiabatic changes, and how can such changes be brought about in a given volume of gas? Describe some adiabatic effects in gases, giving wherever possible the quantitative relations involved.

6. Give an account of Andrews's experiments with carbonic acid gas. Describe some methods of liquefying gases which are based on the results deduced from Andrews's experiments.

7. Analyse the essential parts of a heat engine. Explain with the help of diagrams the workings of (a) a steam engine, and (b) an internal combustion engine, and show how they conform to the requirements of a heat engine.

## C

8. Describe a method of measuring directly the velocity of light in a transparent medium. How has it been shown that this velocity depends upon the colour of the medium?

9. Describe with necessary diagrams the optical parts of an astronomical telescope which is fitted with a micrometer eyepiece. How can you

use it to measure angular distances between stars? In what respects does an opera glass differ from an astronomical telescope?

10. Light is supposed to be propagated as transverse waves through space. Give some evidences in support of this theory.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Attempt not more than six questions. Question 4 is compulsory.*

*All questions are of equal value.*

1. Explain with diagrams the nature of the vibrations of a tuning-fork. What special features make it a valuable instrument in the scientific study of sound?

2. What is it that enables us to distinguish the sounds of the different vowels when we hear them, and how do the differences arise?

3. Explain why sound travels faster and is heard at greater distances in liquids and in solids than in gases.

4. A zinc and chromic acid primary cell gives about 2.25 volts. From this, calculate the rise of temperature produced when one gramme of zinc filings is stirred into 500 grammes of dilute sulphuric and chromic acids mixed. ( $J=4.2 \times 10^7$  ergs, the C.G.S. unit of electricity deposits 0.0001038 grammes of hydrogen, and the atomic weight of zinc is 65.4. The specific heat of the dilute acid may be taken as unity.)

5. Discuss in an elementary way the physical principles on which the working of an ordinary electric motor is based.

6. Describe the general features of the earth's magnetic field, and indicate briefly how they are studied.

7. Explain fully the purpose served by the bundle of iron wires which forms the core of an induction coil. Has the kind of iron used any influence on the working of the coil?

8. What is diamagnetism, and how is it observed and studied? Mention some classes of substances known to be diamagnetic.

9. Describe some well-known form of electrometer, and explain how you would use it in practice.

## CHEMISTRY—HONOURS

<b>Paper-Setters—</b> <b>(Pass and</b> <b>Honours.)</b>	{	SIR P. C. RAY, Kt., C.I.E., F.C.S.
		PROF. PRAPHULLACHANDRA MITTER, M.A., PH.D.
		„ JNANENDRANATH MUKHERJEE, D.Sc.
		DR. JNANENDRACHANDRA GHOSH, D.Sc.
		MR. P. R. RAY, M.Sc.
		PROF. H. K. SEN, M.A., D.Sc.

### THEORETICAL

<b>Examiners—</b> <b>(Honours.)</b>	{	DR. PANCHANAN NIYOGI, M.A., PH.D.
		PROF. JNANENDRANATH MUKHERJEE, D.Sc.
		MR. BARUNCHANDRA DATTA, M.A.
		DR. M. QUDRATI KHODA, D.Sc. (Lond.).

## FIRST HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Attempt FIVE questions only.*

*The questions are of equal value.*

1. Give a short account of the chemistry of the *olefines*.
2. What do you understand by the *hardening* of fats and oils? Describe the process and discuss its economic importance.
3. How are the alkyl nitriles and *iso-nitriles* prepared? Discuss their constitution.
4. How would you prepare the following :—(a) phenyl hydrazine, (b) phenolphthalein, (c) benzyl alcohol, (d) *m*-nitrotoluene, (e) *glycine*, (f) tertiary butyl alcohol?
5. How is phthalimide prepared? Describe its use in the preparation of (a) alkylamines, (b) anthranilic acid.
6. Write a short essay on geometrical isomerism.
7. A substance A contains C=24.2, H=4.0, and Cl=71.8 per cent., and has a vapour density of 49.5. When treated with aqueous alkali, A is converted into a second substance B, devoid of chlorine, and containing C=54.5 and H=9.1 per cent. Deduce the molecular formulas of A and B and also their structural formulas.

## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only SIX questions are to be attempted.*

*The questions are of equal value.*

1. Write a short essay on the atomic theory, indicating the changes that should be made in the old Daltonian conceptions in the light of modern knowledge.
2. It is stated that the properties of an element are dependent in a great measure on the different numerical values of valency which it exhibits in its compounds. Discuss this statement by citing as many illustrations as you possibly can.
3. Describe the general properties of the alkaline-earth elements. Discuss the position of magnesium in this group.
4. Discuss the reasons which justify the following pairs of elements being placed in the same group of Mendeleef's table :—
  - (a) Sodium and copper.
  - (b) Sulphur and chromium.
  - (c) Chlorine and manganese.
5. Write short notes on the following :—
  - (a) Eutectics and intermetallic compounds.
  - (b) Allotropy.
  - (c) Oxides and peroxides.
  - (d) Rusting of iron.

6. Give an account of the properties and constitution of the oxyacids of phosphorus.

7. How would you prove that—

- (a) potassium ferrocyanide contains iron;
- (b) hydrofluosilicic acid contains silicon;
- (c) potassium mercuri-iodide contains iodine;
- (d) carbon dioxide contains carbon?

8. Under what circumstances do the following substances react, and what are the products formed? Give equations in each case :—

- (a) potassium chlorate and iodine;
- (b) potassium iodate and potassium iodide;
- (c) carbon monoxide and steam;
- (d) iron and nitric acid.

### THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Not more than FIVE questions are to be attempted.*

*All questions carry equal marks.*

1. Deduce from Van der Waal's equation the relationship for corresponding states. Discuss how far this relationship is in agreement with the observed behaviour of gases.

2. Deduce equations showing the relation between the saturation pressure of a pure liquid and (a) the temperature, (b) the concentration of a non-volatile non-electrolyte dissolved in it.

The osmotic pressure of a cane-sugar solution containing 0.825 gm.-mol. of sugar per litre of solution is 26.62 atmospheres at 20°. Compare this figure with the value calculated on the assumption that the solution is an 'ideal' dilute one.

3. Deduce an equation showing the variation of the heat of a reaction, where all the substances involved are solids, with temperature.

The heat of formation of dilute NaOH solution from NaOH and aq. is 111,810 cal.; that for HCl solution is 39,315 cal. The heat of neutralization of dilute NaOH by dilute HCl is 13,745 cal., and the heat of solution of NaCl in diluted solution is -1180 cal. Calculate the heat of formation of NaCl from its elements if the heat of formation of liquid water is 69,360 cal.-mol.

4. Find out the velocity of K<sup>+</sup> ion in aqueous solution at 18° under a potential gradient of 1 volt per cm. from the following data :— $u_{\infty}$  for KCl at 18° = 180. Transport number of Cl<sup>-</sup> in KCl = 0.495.

5. Explain what is meant by a solution. How would you distinguish between a colloidal and a true solution? Give examples illustrating your answer.

6. Write a note on the allotropic modifications of sulphur. How are the points of transition from one form to another measured?

7. Describe fully two methods for determining the strength of a base.

## FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only FIVE questions are to be attempted.*

*The questions are of equal value.*

1. Give a short account of the methods employed for the quantitative separation of iron, chromium, and aluminium from one another and the qualitative separation of copper from cadmium. How would you detect the minute traces of copper or iron present in a solution?

2. Explain what is meant by solubility product and give *three* illustrations of the application of this concept to the development of methods in qualitative analysis.

The solubility of barium sulphate is  $2.3 \times 10^{-4}$  gm. in 100 c.c. of water. What is the percentage error involved in washing a precipitate of 0.200 gm. of barium sulphate with (a) a litre of water, (b) a litre of N/100 sulphuric acid?

(Ba=137, S=32, O=16.)

3. Name the important sources from which silver is obtained. Give an account of the different methods for the extraction of silver from these sources. How would you prepare chemically pure silver from the commercial sample?

4. Describe briefly the various methods that are in use for the manufacture of nitric acid. How would you estimate the nitrogen-content of a sample of nitrate-nitrite mixture?

5. How are the following substances prepared and what are their uses:—(a) ultramarine, (b) methanol, (c) phthalic acid, (d) colloidal silver?

6. Write short notes on the following:—(a) condensation, (b) Grignard's reagent, (c) mutarotation, (d) permutit.

7. Describe the manufacture of illuminating gas, giving a full account of the by-products obtained and their utilization. How would you detect presence of oxygen in illuminating gas?

## CHEMISTRY—PASS

Examiners—	{	MR. KALIDAS MALLIK, M.A.
		„ KIRANCHANDRA MITRA, M.A.
		„ HARIDAS MUKHERJEE, M.A.
		DR. ANUKULCHANDRA SARKAR, M.A., Ph.D.
		„ DHIRENDRANATH CHAKRABARTI, Ph.D.
		MR. DHIRENDRANATH MUKHERJEE, M.A.

## FIRST PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Attempt six questions only, Question 8 being compulsory.*

1. How would you obtain pure acetone from pyroligneous acid? 16  
How can it be prepared from starch? State the properties and uses of acetone.



2. How is ethyl iodide prepared? Write equations indicating the action of the following reagents on the substance :— 16

- (a) aqueous potassium hydroxide;
- (b) alcoholic potassium hydroxide;
- (c) alcoholic ammonia;
- (d) sodium;
- (e) zinc-copper couple.

3. Name the sources of formic acid. How is the anhydrous acid prepared? In what way is the acid related to hydrocyanic acid? Give reasons for your answer. 16

4. How is aniline prepared on a large scale? State its uses. Starting from aniline, how would you obtain (a) benzene, (b) phenol, and (c) mono-brom benzene? 16

5. Describe fully the action of chlorine on toluene under different conditions, and state the uses of the products obtained. 16

6. Give an outline of the various methods which have been used to liquefy gases. 16

7. Describe the preparations of a colloid. What are the properties of gelatine which characterize it as a colloid? What are the reasons for distinguishing broadly between two classes of colloids? 16

8. An organic compound containing sulphur gave on analysis the following result :—0.1536 gm. gave 0.2566 gm.  $\text{CO}_2$  and 0.0525 gm.  $\text{H}_2\text{O}$ ; 0.1445 gm. gave 0.137 gm.  $\text{BaSO}_4$ . 20

Determine its molecular formula.

(Ba = 137.)

## SECOND PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions are of equal value.*

*Not more than six questions are to be attempted.*

1. Discuss Mendeléeff's classification of elements in the light of the more fundamental discoveries made since its formulation.

2. Explain with illustrations what you understand by—(a) atomic number, (b) isotopes, (c) allotropy.

3. How are the following substances prepared :—(a) nickel carbonyl, (b) potassium bichromate, (c) barium peroxide, (d) stannic chloride?

4. Describe the Bessemer process for the manufacture of steel. How do you distinguish between wrought iron and steel?

5. Describe the preparation of the following substances in a pure condition :—iodine, hydrogen, mercury, gold.

6. Write a note on the methods which have been used in determining atomic weights.

7. Describe with equations what happens when a current of hydrogen sulphide gas is passed through—

- (a) a solution of sulphur dioxide;
- (b) gaseous chlorine;
- (c) a solution of ferric chloride;
- (d) a solution of sodium arsenite.

8. (a) Explain why elementary substances are assumed to have zero heat contents. In what cases do we depart from this rule?

(b) The heat of neutralization of  $\text{HNO}_3$  by  $\text{NaOH}$  is 13,680 cal. and of dichloroacetic acid 14,830 cal. One equivalent of  $\text{NaOH}$  aq. is added to a mixture of one equivalent of  $\text{HNO}_3$  and  $\text{CHCl}_2\text{COOH}$ ; the heat evolved is 13,960 cal. Calculate the relative strengths of the two acids.

## PHYSIOLOGY—HONOURS

<i>Paper-Setters— (Pass and Honours.)</i>	{	SIR NILRATAN SIRCAR, KT., M.A., M.D., LL.D., D.C.L.
		RAI BAHADUR DR. UPENDRANATH BRAHMA- CHARI, M.A., M.D., Ph.D.
		LT.-COL. A. C. MACGILCHRIST, I.M.S.
		PROF. S. C. MAHALANOBIS, B.Sc., F.R.S.E.
		MR. B. C. GHOSH, M.A., M.B., B.C. DR. GIRINDRASEKHAR BOSE, D.Sc., M.B.

## THEORETICAL.

<i>Examiners— (Honours.)</i>	{	DR. SUBODHCHANDRA MAHALANOBIS, B.Sc., F.R.S.E.
		RAI SATISCHANDRA BANERJEE, BAHADUR, L.M.S
		MR. NIBARANCHANDRA BHATTACHARYYA, M.A.
		DR. GIRINDRASEKHAR BOSE, D.Sc., M.B.

## FIRST HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Try any THREE questions.*

*All questions are of equal value.*

1. Write what you know about the response of the auricle to rapid stimulation.
2. Describe the mechanism of gaseous exchange in the lung.
3. Mention the distribution of ciliated epithelium in the human body, and describe the structure and function of ciliated cells. What explanations have been suggested for ciliary motion? Give diagrams.
4. Write notes on :—(a) caisson disease, (b) heart block, and (c) karyokinesis.

## SECOND HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Not more than THREE questions are to be attempted.*

*The questions are of equal value.*

1. Discuss the theories of renal function.
2. Give an account of nitrogen elimination.
3. Discuss the proteolyses that take place in the alimentary canal and the liver.
4. Write an account of the fat soluble vitamins.

## THIRD HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer only FOUR questions.*

*The questions are of equal value.*

1. Describe the development, structure, and functions of the pituitary body.
2. Give an account of the changes that occur in a nerve when a constant electric current is allowed to flow along it.
3. Discuss the formation of indol and phenol compounds in man and the manner of their elimination from the body.
4. Describe the experimental methods by which the seat of fatigue in a nerve-muscle preparation may be determined. Explain the cause of fatigue.
5. Discuss the mechanism of the maintenance of blood sugar level, and its derangements.

## FOURTH HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer only FOUR questions.*

*The questions are of equal value.*

1. Describe the structure and functions of the cochlea.
2. Give an account of the connexions of Deiter's nucleus and explain the functions of the nucleus.
3. Describe the respective role of the various receptors which are concerned in posture and equilibrium.
4. Describe the principal decussations of nerve fibres which occur in the mid-brain.
5. Trace the paths of visual impulses from the retina to the cerebrum, and show the interrelations of the various nerve centres associated with vision.

## PHYSIOLOGY—PASS

Examiners—	{	MR. MANMATHANATH BANERJEE, M.Sc.
		„ NARENDRA MOHAN BASU, M.Sc.
		„ SATINDRA KUMAR SEN, B.Sc., M.B., D.P.H.
		„ BIMALCHANDRA GHOSH, M.A., M.B., B.C.

## FIRST PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any FIVE questions.*

*All questions are of equal value.*

1. Describe the condition of asphyxia, stating the general causes that bring it about.

2. Discuss the significance of the respiratory quotient and its variations.
3. How is the venous flow kept up and adjusted?
4. Give a brief account of the events of the cardiac cycle.
5. What do you understand by true alkalinity? How is the reaction of blood maintained?
6. Mention the sources of nitrogen in the urine.
7. How is the temperature of the human body kept constant?

### SECOND PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any FIVE questions.*

*All questions are of equal value.*

1. Give an account of the control of the flow of gastric juice.
2. Give a brief account of the autonomic nervous system.
3. Describe the main cerebral afferent paths in the central nervous system.
4. Describe the structure and functions of the retina.
5. Contrast the actions of the internal secretions of the pituitary and the suprarenal glands.
6. Write in brief the results of vitamine deficiency.
7. Trace the origin and fate of amino-acids.

### BOTANY—HONOURS

<i>Paper-Setters— (Pass and Honours.)</i>	{	PROF. SUBODHCHANDRA MAHALANOBIS, B.Sc., F.R.S.E.
		„ S. P. AGHARKAR, M.A., Ph.D.
		„ S. R. KASHYAP, B.A. (Cantab.).
		„ P. K. PARIJA.
		DR. KRISHNADAS BAGCHI, M.A., D.Sc.

#### THEORETICAL

<i>Examiners— (Honours.)</i>	{	PROF. SUBODHCHANDRA MAHALANOBIS, B.Sc., F.R.S.E.
		DR. SAHAYRAM BOSE, Ph.D.
		MR. SURENDRACHANDRA BANERJEE, M.A., B.Sc., F.L.S.
		PROF. S. P. AGHARKAR, M.A., Ph.D.

### FIRST HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate your answers by neat sketches wherever necessary.*

*Answer any FIVE questions.*

*All questions carry equal marks.*

1. Write short notes on any five of the following :—Haustoria, Sole-nosteles, Hadrom, Phelloderm, Endosperm, Pseudocarp, Parthenogenesis.

2. Give a general account of the modifications of leaves for the performance of special functions, illustrating your answer from Indian plants.

3. Give a brief *résumé* of the views held regarding the origin of the Angiosperms.

4. Give a general account of the characters and affinities of the *Palmaeae*. Mention the characters on which the subdivisions of the family are based and enumerate the most important economic plants belonging to it.

5. Describe the range of floral structure in the *Malvales*, mentioning the principal families included in the order. Enumerate the most important economic plants belonging to these and give their geographical distribution.

6. Enumerate the principal dye-yielding plants of India. Assign these to their families, give their geographical distribution, and mention the part or parts from which the dye-stuff is produced.

7. Mention the plant-geographical divisions of India which are included in Bengal, and give a short account of the types of vegetation found therein.

## SECOND HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

1. *Either*, Describe the structure of the sporocarp of *Marsilea*, and point out the homology of its parts to those of a common homosporous fern. 20

*Or*, Describe the structure of the stem of one of the higher ferns, briefly indicating the steps by which the stelar structure has been evolved from simpler types.

2. *Either*, Compare and contrast the prothallus of *Equisetum* with that of a fern and *Lycopodium*. 20

*Or*, Describe the structure of the stem of any species of EITHER *Lycopodium*, or *Selaginella*.

3. *Either*, Describe the methods of vegetative reproduction and perennation in the Himalayan liverworts. 20

*Or*, Describe the structure of the sporogonium of *Anthoceros*, and discuss its importance in relation to the origin of the higher plants.

4. *Either*, Describe the mode of reproduction in the *Zygomycetes*, with special reference to any type with which you may be familiar.

*Or*, Describe the chief forms of the fructification in the higher *Basidiomycetes*.

5. *Either*, Describe the chief characters of the *Conjugatae* and point out the affinities of the group. 20

*Or*, Describe the life-history of *Dictyota*, and briefly discuss its importance in connexion with the origin of the alternation of generations.

## THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The questions are of equal value.*

*Answer only FIVE questions.*

1. Give an account of the physiological factors that determine the arrangement of photosynthetic tissues in green plants.
  2. Describe the various means of ventilation that occur in plant tissues, and explain their physiological bearing.
  3. Give an account of latex-forming structures, and explain the function of latex.
  4. Describe fully the process of digestion that takes place in the germinating seed, and compare it with that obtaining in a carnivorous plant.
  5. Give an account of movements of growth dependent on internal causes.
  6. Describe the characteristics of tropophytes.
  7. Give an account of the physical properties of clay, and explain their importance to the fertility of the soil.
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## FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions are of equal value.*

*Illustrate your answer by neat sketches wherever necessary.*

*Answer Question 1, and any FOUR other questions.*

- \*1. Write a short essay on the xerophytic adaptations of plants, illustrating your answer by examples from the Indian flora.
2. Write short notes on any five of the following :—survival of the fittest, fluctuating variations, acquired characters, allelomorphs, genes, chromosomes, linkage.
3. Discuss in brief the importance of the study of heredity for the production of improved varieties of cultivated plants.
4. Give a brief *résumé* of the views held regarding the origin of Gymnosperms and their relationships to the Angiosperms.
5. Give a general account of the Gnetales, drawing particular attention to the characters which lead to this group being considered the most highly evolved among the Gymnosperms. Give a classified list of the Indian species belonging to this group.
6. Give a general account of the structure and affinities of the Cordaitaceae, mentioning the Indian species of the group and their geographical distribution.
7. Give a general account of the secondary growth in thickness of the Monocotyledons.

**\* Compulsory question.**

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Examiners— { MR. GIRIJAPRASANNA MAJUMDAR, M.Sc.  
 ,, SATYASARAN SINHA, B.Sc. (Illinois)

### FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Examples should be given from Indian plants as far as possible.  
 Only FIVE questions to be attempted, each carrying equal marks.*

1. Give an account of aerial modification of stem with examples. 20
2. What is a fruit? Describe the various ways the fruits open to liberate the seeds. 20
3. What is karyokinesis? Describe this phenomenon in connexion with the growth of apical meristem of root tip. 20
4. Describe the formation of bark in the woody dicotyledons. 20
5. Compare the leaf anatomy of the pine with that of the India-rubber tree. 20
6. Compare the formation of the Cambium in the root with that of the stem. 20
7. Compare the following natural orders :— 20
  - (a) Apocynacæ and Asclepiadacæ.
  - (b) Verbinacæ and Labiatæ.
  - (c) Gramineæ and Cyperacæ.
8. Write a short account of the natural order Leguminosæ, and discuss the importance of the family from the economic point of view. 20

### SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Answer FIVE questions, of which Question 1 must be one.*

1. Describe briefly the progress from isogamy to oogamy among the thallophytes. 20
2. Give a detailed account of the development of the sporophyte of a fern. 20
3. Either, Describe the progressive degeneration of sexuality in Fungi. What is the probable cause of this phenomenon? 20  
 Or, What is a facultative saprophyte? Illustrate your answer with reference to the life history of a fungus you have studied. 20
4. Describe the distribution of the assimilating and conducting tissues in the bryophytes, and explain how they are adapted to land life. 20
5. What part does the floral form play in pollination? Give illustrations. 20
6. Give an account of the adaptations of aquatic plants to their habitat. 20
7. What is fermentation? What biological advantage does the fermenting organism derive from it? 20
8. Write an essay on the relation between ants and plants. 20

## GEOLOGY

*(Pass and Honours.)*

*Paper-Setters—* { MR. D. N. WADIA  
 DR. CYRIL FOX, D.Sc.  
 PROF. L. K. MATHUR  
 „ S. K. BISWAS, M.A.

THEORETICAL

*(Honours.)*

*Examiners—* { DR. A. H. HIRAN, D.Sc. (Edin.)  
 MR. HEMCHANDRA DASGUPTA, M.A., F.G.S.  
 „ BHUPENDRANATH MAITRA, M.A.  
 „ SARATLAL BISWAS, M.A.

## FIRST HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer THREE questions from SECTION A and THREE from SECTION B.*

*The figures in the margin indicate full marks.*

## SECTION A

1. Explain the following terms, giving neat sketches:—hanging wall, ore shoot, saddle reef, and blind lode. 16
2. What is secondary enrichment? Explain fully the conditions which favour the formation of a zone of secondary enrichment in a mineral vein. 16
3. Describe the nature and succession of saline residues formed from the desiccation of sea-water. 16
4. Name the minerals which are known to occur as alluvial deposits. Indicate briefly the procedure to be adopted in prospecting for alluvial gold along a broad valley. 18

## SECTION B

5. Give the names and formulae of all the ore minerals of tin, lead, zinc, and iron from which the respective metals are extracted on a commercial scale. 16
6. Describe fully the physical and chemical characters which distinguish the various members of the pyroxene group of minerals. 16
7. Enumerate the common twins observed in the feldspars, and state the twin axis or the twin plane and the plane of composition in each case. 16
8. What are polarization colours? Explain their mode of formation and their relation to the birefringence of a mineral and the thickness of the mineral plate. 18



## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer FIVE questions only.*

*The questions are of equal value.*

1. Describe the processes that lead to the development of the gneissose structure. By what criteria is an orthogneiss distinguished from a paragneiss?

2. Distinguish between—

- (a) poikilitic and porphyritic textures;
- (b) endogenetic and exogenetic rocks;
- (c) laccolith and batholith;
- (d) dynamic and static metamorphism.

3. Give an account of the distribution, mode of occurrence, and genesis of the laterite and the salt formations of India.

4. Write notes on :—dolomitization, metasomatism, eutectics, and hybrid rocks.

5. Describe a scheme of classification of the igneous rocks, and indicate in that scheme the positions of the following rocks :—augitite, norite, tonalite, phonolite, and nordmarkite.

6. What do you understand by—(a) magmatic differentiation, and (b) reaction relation? Illustrate your answer by examples.

7. Give the characteristic features of the following rocks :—khondalite, charnockite, mica-peridotite, anorthosite, calciphyre, gondite agglomerate, arkose, fire-clay, and epidiorite.

## THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Any FIVE questions out of these carry full marks.*

1. Describe the chief elements of the fauna of the *Productus* limestone of the Salt Range, and draw your conclusions regarding the character of the life of the period.

2. Give an account of the Indian fossil *Anthracotheroids*.

3. Give an account of the geological history and the main lines of descent of the fossil Indian *Suina* in the tertiary fresh-water formations.

4. Assign the following to their exact geological horizons, mentioning any notable rock or fossil contents of each :—*Sripermatur* beds, Chharat stage, Kamliat stage, agglomeratic slate series, Lameta beds, pale sandstone, Napeng beds.

5. Trace the leading genera and species of the *Proboscidea* from the earliest to recent times. Compare the history of the Indian proboscidea with those of other parts of the world.

6. Compare in detail the characters of the Talchir flora with those of the Jabalpur and Rajmahal floras from the different Gondwana provinces of India.

7. Write notes on the following fossil genera, giving their geological horizon, range in time, and systematic position :—*indoceras*, *teleoceras*, *Heteriodon*, *belodon*, *telmatodon*, *redlichia*, *syringothyris*, *protoretepora*, *matodonsaurus*, *radiolites*, *ptychodus*.

## FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only FIVE questions to be answered.*

*The figures in the margin indicate full marks.*

1. Discuss the distribution of land and sea during the Cretaceous period in India. 20
2. Describe briefly the lower Gondwana strata of Peninsular India. 20
3. State the type locality, geological horizon, and characteristic fossils of the following strata :—Talchir series, Panchet series, Umaria marine beds, Upper Plateau limestone, and Napeng stage. 20
4. Give a short account either of the Ceratite beds of the Punjab Salt Range, or of the Cretaceous rocks of Assam. 20
5. Describe briefly the Cambrian strata of the Punjab Salt Range. 20
6. Give a short account of the Eocene strata of Assam, Burma, and North-Western India. 20
7. Name the horizons which are characterized by the following fossils :—*rhacopteris inaequilatera*, *syringothyris cuspidata*, *ceratites subrobustus*, *ampullina birmanica*, *eurydesma globosum*, *pteria contorta*, *gangamopteris cyclopteroides*, *assilina granulosa*, *brachyops laticeps*, and *palissya conferta*. State whether they are animals or plants in each case. 20

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Examiners— { MR. HEMCHANDRA DASGUPTA, M.A., F.G.S.  
DR. MANMOHAN CHATTERJEE, B.Sc., Ph.D.  
FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Try six questions only.*

*The figures in the margin indicate full marks.*

1. Give a complete drawing with crystal axes and Miller's notations of faces, of any natural crystal with which you are familiar. 16
2. Give an account of minerals belonging to the felspar group. 16
3. Describe completely the appearance of olivine gabbro in hand specimens and under the microscope. In what important respects does it differ from granite? 16
4. Explain, with neat sketches, the meanings of the following terms :—crystallographic axes, ether axes or axes of optical elasticity, and optic axes. 16
5. Give the chemical and physical properties of the following minerals and their commercial uses, if any :—chromite, topaz, serpentine, monazite and aquamarine. 16
6. Write explanatory notes on the following :—sill. ophitic texture, columnar jointing, pegmatite and diatom ooze. 20
7. Describe the features of sedimentary rocks which give evidence of (a) glacial, (b) shallow water, and (c) desert conditions of formation respectively. Give examples. 16
8. Describe the effect of weathering on the major rock-forming minerals, and indicate the nature of the secondary products which are formed. 16

## SECOND PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Only five questions to be answered.*

*All questions are of equal value.*

1. Discuss briefly the origin of earthquakes, with special reference to seismic tracts in India.

2. Name the volcanic rocks of India and Burma which are younger than the Trias. State those which have been erupted from fissures and those which were discharged from volcanoes.

3. Explain, with sketches, what you understand by a syncline, a horst, a rift valley, a fault, an unconformity, an anticlinorium, an overthrust, an overlap, imbricated structure, and klippen.

4. Define clearly what you mean by a conglomerate, a breccia, an agglomerate, and shingle when referring to rocks. State their mode of formation.

5. State the geological horizons (in India) to which the following fossils belong :—*conularia warthii*, *syringothyris cuspidata*, *schwagerina blanfordi*, *daomella lommeli*, *brachyops laticeps*, *cordaites hislopi*, *palyssia comferta*, *cardita beaumonti*, *baculites vagina*, and *trigonia costata*.

6. Discuss very briefly the faunistic and floral relationships of each of the animal and plant fossils mentioned in Question 5.

7. State where the following formations occur in India and Burma :—Parsora stage, Neobolus beds. Napeng beds, Panchet series, plateau limestone, Namyau beds, agglomeratic slates, Kaimur series, iron ore series, and Dalma trap. State the age of these rock formations.

## ZOOLOGY

(Pass and Honours.)

Paper-Setters—	{	DR. EKENDRANATH GHOSH, M.Sc., M.D., F.Z.S.
		„ RAMANUJAN, M.A., Ph.D.
		„ GEORGE MATHAE, M.A.
		„ KARAMNARAIN BAHL, D.Sc.
		„ D. R. BHATTACHARYYA
		LT.-COL. R. B. SEYMOUR SEWELL, M.A., I.M.S., F.Z.S.

## THEORETICAL

(Honours.)

Examiners—	{	LT.-COL. R. B. S. SEWELL, M.A., I.M.S., F.Z.S., F.L.S.
		DR. HIMADRIKUMAR MOOKERJEE, D.Sc.
		„ BAINI PRASAD, D.Sc.
		PROF. B. K. DAS, D.Sc.

## FIRST HONOURS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Not more than FOUR questions are to be attempted.*

*All questions carry equal marks.*

1. Give a detailed account of the phenomenon of syngamy among the Protozoa.
2. With reference to the Platyhelminthes and Nemathelminthes only, discuss the effects of a parasitic mode of life on the parasites themselves.
3. Discuss the relative value of the criteria employed in classifying sponges.
4. Describe the formation and relationships of the body spaces in any Echinoderm with which you are acquainted.
5. Give a comparative account of the more important forms of nematocysts, and the role they play, in the Coelenterata.
6. Write a short account of the ecology of the Mollusca.
7. Give a critical review of the views on the segmentation of the arthropod head.
8. Do you regard the Archiannelida, Chaetopoda, Gephyrea, and Hirudinea as constituting a monophyletic phylum? Give reasons in support of your view.

## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only FOUR questions to be attempted.*

*The questions are of equal value.*

1. Describe briefly the characteristics of Protochordae. Discuss their chordate affinities.
2. Discuss the characters and affinities of the Dipnoi.
3. How are the lizards and snakes related to each other? Discuss the question fully.
4. What are the distinguishing characters of the carinate birds?
5. What structural modifications are found in the organization of the Cetacea and Sirenia with reference to their aquatic habitats?

## THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only FIVE questions are to be attempted.*

*Illustrate with sketches, wherever possible.*

*All questions carry equal marks.*

1. Give a short general account of the process of cell-division known as Mitosis.

2. Write a detailed account of Chromosomes.
3. What is connective tissue? In what different forms may it occur? State the distinguishing features of each form.
4. Discuss the different ways in which a gastrula may be formed.
5. Discuss the influence of yolk on segmentation.
6. Describe the development of the embryonic membranes in the development of the chick. State their function.
7. Write notes on—Mitochondria, Primitive Streak, Blastocoel, Splanchnopleure, Mesonephros.

#### FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

Write an essay on one of the following subjects :—

100

- (a) The relationships of the Protozoa and the Metazoa; and the steps by which the one may have been derived from the other.
- (b) The effect of sexual selection in the evolution of species.
- (c) Protective coloration and mimicry.
- (d) The origin of parasitism in the animal kingdom.

*Examiners—* { DR. EKENDRANATH GHOSH, M.Sc., M.D.  
MR. DURGADAS MUKHERJEE, M.Sc.

#### FIRST PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Not more than FIVE questions should be attempted.*

*All questions carry equal marks.*

1. Describe and contrast the external characters of a starfish, a sea urchin, a holothurian and a crinoid. To what extent are the differences observed due to mode of life?
2. Discuss the comparative anatomy of the foot in the Mollusca.
3. Compare and contrast the life-histories of the malarial parasite and *Monocystis*.
4. Give an account of the excretory organs of the Arthropoda.
5. Give a detailed account of the life-history of any nematode worm. What are the principal anatomical characters that distinguish a nematode from an annelid worm?
6. Describe examples of the principal types of adaptation of the mouth-parts of insects to diet.
7. What are the characteristics of the coelom? Describe the condition of this space in the principal groups of invertebrates.
8. Compare the life-history of a zoophyte producing free medusae with the life-history of one of the Scyphomedusae, such as *Aurelia*.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Attempt FIVE questions only.*

*The figures in the margin indicate full marks.*

1. Trace the evolution of the shoulder girdle in the vertebrate series. 20
2. What are the aortic arches? Trace their history in the series—fish, amphibian, bird, mammal. 20
3. Compare the brains of *Scyllium*, *Rana* and *Lepus*. Give sketches, and explain in what particulars the brain of the rabbit has advanced above those of the other types. 20
4. Give an account of the distinguishing features and the geographical distribution of the Marsupialia. 20
5. Describe and discuss the chief skeletal characters of the class Reptilia and its main subdivisions existing at the present day. 20
6. Contrast the modes of division of the fertilized egg and of the establishment of the primary germ layers in *Rana* and *Gallus*. 20
7. Describe a simple case of Mendelian inheritance in an animal. 20
8. Discuss fully any instance known to you in which the study of fossil forms has thrown light on the phylogeny of existing forms. 20

## EXPERIMENTAL PSYCHOLOGY

*(Pass and Honours.)*

*Paper-Setters—* { SIR NILRATAN SIRCAR, Kt., M.A., M.D.,  
LL.D., D.C.L.  
DR. GIRINDRASEKHAR BOSE, D.Sc., M.B.  
PROF. J. R. BANERJEA, M.A., B.L.  
MR. HARIDAS BHATTACHARYYA, M.A.  
PROF. S. C. MAHALANOBIS, B.Sc., F.R.S.E.  
MR. KIRANCHANDRA MUKHERJEE

*(Pass)*

*Examiners—* { MR. HARIDAS BHATTACHARYYA, M.A.  
DR. SUHRIDCHANDRA MITRA, M.A. (Cal.), Ph.D.

## FIRST PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any FIVE questions.*

*Questions are of equal value.*

1. Characterize the nature of human consciousness, bringing out specially its unity, continuity, and teleological character.
2. Either, As opposed to feelings, sensations are said to reveal the external world. Explain clearly by what characteristics sensations give that knowledge.

Or, Distinguish perception, illusion and hallucination, with concrete illustrations. Illustrate and explain *three* principal geometrical illusions.

3. Describe the methods by which the eyes understand and measure depth.

What are the comparative advantages and disadvantages of touch and vision regarding the perception of the third dimension?

4. Distinguish memory from expectation and day-dream. Discuss the utility of memory. Can it be improved? If so, how?

5. How is thought related to language? Bring out the instinctive and acquired factors of conventional language.

6. Distinguish instinct, emotion, and sentiment. Analyse the nature of the patriotic sentiment.

7. What are the difficulties of studying emotions (a) introspectively, and (b) experimentally?

Why do different emotions have different bodily expressions?

8. Write an essay on attention, concentrating on its relation to consciousness, interest, and bodily adjustment.

9. Discuss the conditions of valid belief. How is belief distinguished from free imagination?

10. How far is a study of abnormal minds helpful to the understanding of normal minds?

In answering this question restrict yourself to cases of double or multiple personality.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Answer any SIX questions.*

*The questions are of equal value.*

1. Describe the phenomena of visual contrast and the laws that govern them. What is the precise difference between the contrast theories of Helmholtz and Hering?

2. Describe the psychological importance of the cutaneous and kinæsthetic sensations.

3. What is a colour pyramid? Explain the utility of such a representation.

4. What is the difference between—(a) image and sensation, (b) feeling and emotion, (c) mood and sentiment, (d) habit and adaptation, and (e) memory and imagination?

5. Describe the principles and limitations of the method of expression in the investigation of affective phenomena.

6. What is a natural reaction? How do you find the natural reaction time?

7. Discuss the principles of stereoscopic vision.

8. Describe the different subjective and objective sources of error in a psychological experiment. How do you counteract them?

## ANTHROPOLOGY

*(Pass and Honours.)*

*Paper-Setters*— { DR. G. S. GHUREYE  
 „ J. H. HUTTON, D.Sc.  
 MR. KSHITIPRASAD CHATTERJEE, M.A.  
 RAI BAHADUR SARATCHANDRA RAY, M.A., B.L.

## THEORETICAL

*(Honours)*

*Examiners*— { RAI BAHADUR SARATCHANDRA RAY, M.A., B.L.  
 DR. J. H. HUTTON, D.Sc.  
 RAO BAHADUR L. K. ANANTHAKRISHNA IYER,  
 B.A., L.T.  
 DR. PANCHANAN MITRA.

## FIRST HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only FOUR questions to be attempted.*

*All questions carry equal marks.*

1. What are the main types of palaeanthropic man? How and in what respects do they differ, as a group, from neoanthropic man?
2. Discuss the effects of environment on pigmentation, hair, and other physical characteristics, if any, of man.
3. Give a brief account of the racial history of Europe since Mousterian times.
4. State and discuss the different theories of the original home of man.
5. Compare the physical characteristics of the higher apes with those of man, and describe the process by which these differences were gradually brought about.
6. Give a palaeontological chart of the Tertiary and Quaternary periods, noting the different human races and early anthropoid apes found in each geologic system and formation, and the characteristic fauna and climate in Europe and India in each such system and formation.

## SECOND HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*FIVE questions only to be attempted.*

*The figures in the margin indicate full marks.*

1. What do you understand by 'Ethnology,' and what justification is there for studying it? 20
2. What arguments are there to be found for the polygenist view of the human race? Examine them. 20
3. What do you understand by the following terms:—Austronesian, cymotrichous, glabella, steatopygia, pygmy, Hamitic, xegion, Chalcolithic, epicanthic? 20



4. Note as briefly as possible the geographical location and the racial, cultural, and linguistic affinities of the five following tribes or peoples :—Czech, Uzbek, Bantu, Huron, Hova. 20
5. To what racial and linguistic groups would you assign the following five tribes of the Indian Empire, and why :—Bhil, Kadir Korwa, Mawkhen, Toda? 20
6. Contrast and compare the general cultures of any one of the following pairs of tribes :—Chenchu and Gend. Meithei and Newar, Khasi and Oraon. 20
7. Where do you consider the human race to have originated, and why? What do you regard as the courses and directions of the earliest human migrations? 20
8. Indicate in the form of a genealogical table or tree the relationship between the different main races of the world. 20

### THIRD HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Answer only FIVE questions.*

1. Describe the culture of Neolithic Europe, and show on a map of Europe the different sites of Neolithic finds. 20
2. Discuss the racial constitution of Western Europe at the end of the Bronze Age. 20
3. What conclusions would you draw as regards the origins and growth of culture from your study of the pre-historic cultures of Europe? 20
4. Write a critical note on the methods of the disposal of the dead practised in Southern India before its Aryanization. 20
5. Trace the distribution of terraced cultivation, and discuss its significance. 20
6. What are the probable origins of the domestication of animals? 20
7. 'Primitive man is fond of permanent personal adornment.' Comment. 20
8. Describe the primitive modes of transport by water. 20

### FOURTH HONOURS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*Only six questions are to be attempted.*

*The figures in the margin indicate full marks.*

1. Discuss the current views on the origin of caste in India. Can you suggest any hypothesis to cover the inadequacies of the existing theories? 20

2. Write a short note on the rules of inheritance observed among (a) patrilineal, and (b) matrilineal people with regard to (i) inherited, and (ii) acquired property. Discuss their probable origins. 20
3. Define (a) ghost, (b) spirit. Describe the funeral rites of any primitive people of India, indicating the elements based on fear of the dead kindred. 15
4. Discuss the significance of the puberty rites among primitive people, giving examples to illustrate your views. 15
5. Discuss the probable origin of (a) the men's house, (b) secret societies, among primitive people. 15
6. Write a note on (a) blood revenge, and (b) wergild (blood-money), indicating the idea underlying the practice, in each case. 15
7. Discuss the value of folklore and festivals in preserving survivals of an older culture. Illustrate with Indian examples. 15
8. Define (a) sororate, (b) levirate. Discuss the probable origin of the widespread practice of junior levirate in Northern India. 15

Examiners— { DR. BIRAJASANKAR GUHA, M.A., Ph.D. (Harvard)  
MR. PANCHANAN MITRA

### FIRST PASS PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*Only TWO questions from EACH group to be attempted.*

*All questions carry equal marks.*

#### GROUP A.

1. Give a full account of EITHER *Pithecanthropus* OR *Eoanthropus*, and state its relation to the human stem.
2. What dimensions do you regard as of chief importance in classifying human skulls? State the reasons for your answer. Describe accurately the precautions to be taken in ascertaining such measurements.
3. Compare the physical characteristics of the higher apes with those of man.

#### GROUP B.

4. Describe briefly the principal types of humanity found in Africa and the distribution of each. Discuss the geographical and historical factors in these distributions.
5. Give an account of the ethnology of Assam, including the Manipur State.
6. Give a brief survey of the racial history of Burma.

## SECOND PASS PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Not more than SIX questions are to be attempted.*

1. Write a short note on the physical type of pre-palaeolithic and palaeolithic man. Indicate the cultures, if any, associated with each particular type. 25
  2. Write a note on the cave art of the upper palaeolithic age in Europe, indicating the probable motive of its origin. 15
  3. Write a short note on the cultural remains of neolithic man in Europe. 15
  4. Discuss the effect of the domestication of cattle on the status of women in a society acquainted with the rudiments of hoe-cultivation only. 15
  5. Write a short note on preferential mating, giving examples in the case of each type. 15
  6. Describe the rites connected with the disposal of the dead, among any primitive people of India; indicate the elements (if any) that point to a belief in a next world. 15
  7. What is father-right and mother-right? Compare and contrast the two, discussing especially the position of the father in each case. 15
  8. Write a note on (a) Tabu, and (b) Mana, discussing their relation, if any. 15
  9. Discuss the value of language as a test of race. Indicate its usefulness in culture analysis. 15
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## B. Com. Examination, 1931

### BENGALI COMPOSITION

*Paper-Setter*—MR. S. P. MOOKERJEE, M.A., B.L.,  
BARRISTER-AT-LAW.

*Examiner*—MR. TAMONASCHANDRA DASGUPTA, M.A.

*The figures in the margin indicate full marks.*

1. Translate into Bengali any two of the following :—

(a) Generally speaking, the retail trade consists of all those business which buy from the wholesaler in fairly large quantities and sell to the public in smallest quantities. The wholesale trade consists of those businesses which act as intermediaries between the producer or manufacturer and the retailer. Some of the public buy direct from the producer or manufacturer, and so, also, do some retailers but they are comparatively few in number. It is obvious that the wholesaler and retailer depend on acting as middlemen for their livelihood and they must therefore add a percentage to the producer's price as their profit. 20

(b) Dear Sirs,

I have before me a statement of account against you dating back some two months with a note attached to the effect that it has been absolutely disregarded by you. I enclose a copy herewith and must request that you give it your immediate attention. 10

Should there be any discrepancy relating to this account, please communicate with me personally and I shall have the matter looked into. If on the other hand the account is correct I must insist that a settlement is made forthwith.

Thanking you in anticipation,

Yours faithfully,

Secretary.

(c) The situation of a shop is most important as it is absolutely essential to choose a locality where the goods which you intend to sell will be in demand. Again, some businesses will be much more successful if in the main road where they are seen by a good many people. Take the case of a tobacco-nist's shop. A man may have run short of cigarettes or tobacco. The sight of the shop reminds him of the fact and he makes a purchase. So that it is reasonable to presume that the more people who see the shop the bigger the sales of that shop—hence the main road is the best position. 20

2. Translate the following into English :—

দুর্ভিক্ষ ভারতের যেন নিত্য সহচর। প্রায় তিন চারি বৎসর অস্তর ভারতের এক প্রদেশে না এক প্রদেশে দুর্ভিক্ষ উপস্থিত হয়। দুর্ভিক্ষের দৃষ্ট অতি ভয়ানক। দেখা গিয়াছে দুর্ভিক্ষের সময় হঠাৎ কিছু খাবার পাইলে জননী পেটের আলার আপন শিশুসন্তানকে চেলিয়া কেলিয়া নিজে তাহা ভক্ষণ করিতেছে। লোকে উপহৃত অন্নভাবে

পেটের কুখার যা তা খাইতে আরম্ভ করে। গাছের পাতা এমন কি মাটি পর্যন্ত খাইতে ক্রটি করে না। অধিকাংশ লোককেই পেটের পীড়াতে মরিতে দেখা যায়।

3. Give Bengali equivalents for the following expressions :—

10

(a) Bill of exchange, (b) Government promissory note,  
(c) Co-operative credit society, (d) Indent.

4. Write an essay in Bengali on one of the following subjects :—

30

- (1) Middle class unemployment in Bengal.
- (2) Bengal Loan offices.
- (3) Present Trade depression.
- (4) Industrial development in India.

## HINDI COMPOSITION

*Paper-Setter and Examiner—Mr. NALINIMOHAN SANYAL. M.A.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

*The figures in the margin indicate full marks.*

1. Translate two of the following into English :—

24

(a) जापानी वस्त्रों की प्रतिযোগिता इस समय इतनी भोक्ष्य हो गई कि उससे भारत के प्राच्यदेशीय बाजारों पर तो जापान का अधिकार हो ही गया। अब भारत में भी जापानी वस्त्रों का आधिपत्य विकृत होने लगा है। यह अवस्था यहाँ तक पहुँच चुकी है कि भारतीय बाजार के बचेखुचे भाग पर भी जापान का अधिकार होने की संभावना दिखाई पड़ने लगी है। जापान भारत के साथ इस प्रकार प्रतियोगिता करने में क्योंकर सचम हुआ है, इस संबंध में विचार करना आवश्यक है।

(b) आजकल छोट-मोटा कारखाना खोलने या और कोई व्यवसाय करने के लिये इतनी पूँजी होनी तो आवश्यक है, जिससे वास्तविक रूप में काम आरंभ हो सके। बहुत से ऐसे व्यवसाय हैं, जिन्हें थोड़ी पूँजी से नहीं चलाया जा सकता। उनके लिये आरंभ में ही उपयुक्त पूँजी की आवश्यकता पड़ती है। पर यह पूँजी कहाँ से लावे ? उसके लिये पूँजी का प्रश्न ही अत्यन्त कठिन है। पूँजी के लिये दो मार्ग दिखाई पड़ते हैं—या तो उधार लेना या संभूय-समुत्पादन की रीति अवलंबन करना।

(c) भारत से समुद्र के रास्ते व्यापार करनेवाली जातिधर्मों में एक फ़िनोशियन जाति थी। जिस प्रदेश के ये लोग रहनेवाले थे, वह न बहुत बड़ा था और न उपजाऊ ही। इस कारण व्यापार से ही ये लोग अपनी शक्ति और धन को बढ़ा सकते थे। व्यापार में पूर्ण उत्साह होने के कारण इन्हीं ने साखसागर के किनारे के चार बंदरगाह अपने क़ब्जे में कर लिए, और इन्हीं के द्वारा भारत और दक्षिणी अफ़्रिका से व्यापार करने लगे। परंतु साख-सागर से टावर दूर होने के कारण उनको वहाँ तक गाड़ी में माल लादकर ले जाने में कष्ट होता था।

2. Translate *two* of the following into Hindi :—

32

(a) It sometimes happens that the ordinary revenue of the government does not suffice for its current expenditure. In such a case modern governments resort to the practice of borrowing. In former times governments used to lay by a large sum of money to serve them in times of need. But modern financial principles are against hoarding money out of revenue. Surpluses are utilized for remission of taxation. Only such money should be taken from the pockets of the subjects as is essential for public purposes.

(b) The United States is not only a great agricultural and mining country, but it is also a manufacturing country. Manufacture in the States gives employment to no fewer than eight million people, and the value of articles manufactured is reckoned at fully three thousand million sterling, or fully ten times the total value of textiles annually exported by Great Britain. Textile manufactures give employment to over a million and a half of wage-earners ; while iron and steel, and their products give employment to fully a million.

(c) I have your letter *re* account, and must say that I think you are somewhat harsh in your treatment of this matter. As my cashier explained, I am expecting some remittances in a few days, and I can promise you a cheque by Saturday at the latest. By waiting these few days only you will assist me greatly, as legal action will only run me into expenses which I would be glad to avoid ; and you can depend upon it that I shall not fail you on Saturday. I therefore rely upon your leniency in this instance.

3. (a) Give in Hindi very briefly the main ideas contained in the following :—

10

साम्यवाद के छोटे-बड़े सभी आचार्य सिद्धान्त तथा कार्यनीति में मतभेद रखते हुए भी इस बात में सहमत थे कि धनियों और ग़रीबों की विषमता दूर हो जाय। साम्यवाद का यह आन्दोलन तभी शुरू हो गया था जब कि लोहमय दानवों के वर्तमान व्यवसाय का प्रारम्भ नहीं हुआ था।

(b) Fill up the blanks in the following :—

10

गत २४ जनवरी —— बात है। मैक्लेयर गर्जियन —— एक संवाददाता —— भारत —— रहनेवाले उसकी एक अंगरेज़-व्यापारी दोस्त —— वर्तमान भारतीय राजनीति —— सम्बंध में एक पत्र लिखा था। —— पत्र से यह स्पष्ट हो जाता —— कि भारत —— रहनेवाले अंगरेज़ों —— यहाँ का राष्ट्रीय आन्दोलन विलकुल पसंद नहीं है।

4. Write an essay in Hindi on *one* of the following subjects :—

24

(a) Labour strikes, their cause, and their effect.

(b) The comparative importance of division of labour in agriculture and industries.

(c) The Coal trade of India—its present unsatisfactory condition—the obstacles to its development—foreign competition—high railway freight.

## URDU COMPOSITION

*Paper-Setter and Examiner—SHAMS-UL-ULAMA HIDAYET HUSSAIN,  
KHAN BAHADUR, F. A. S. B.*

*The figures in the margin indicate full marks.*

1. Translate into Urdu :—

40

(a) Judging from Sir Mirza Ismail's recent address to the conference of South Indian States at Bangalore, India is distinctly fortunate in having this distinguished statesman as one of its prospective spokesmen at the Round Table Conference. Sir Mirza Ismail is the Dewan of Mysore, the second State in India in the table of precedence, but, as any one who has been there will admit, second to none in enterprise, enlightenment and prosperity. The mere fact that this Hindu State should be administered by a Mahomedan nobleman suggests that it has gone far to solve the perennial Hindu-Moslem problem. Sir Mirza Ismail's unique position in India lends additional weight to his observations on the political situation; but a perusal of them reveals a sanity and an original viewpoint sufficient in themselves to commend them.

(b) Angkor is mysterious. A thousand years ago it was the great capital city of the Khmer Empire. The empire was vast; millions paid tribute to the Brahmin emperors who ruled on a throne supported by pillars of religious superstition. The entire Khmer empire revolved about the deities and to these strange gods the emperors paid a tribute even greater than the tribute paid to themselves.

A great building plan was devised: huge temples and monuments to the gods were to be erected in the capital city in order that the empire might acquire merit. Nothing but the greatest of human achievements would suffice. Angkor was situated on a plain; the gods surely would be pleased if vast and beautiful temples were erected on this site, temples of stone erected on a spot lying hundreds of miles from the stone quarries.

2. Translate into English :—

دو کبوتر ایک ہی آشیانے میں رہا کرتے تھے - ایک کا نام تھا بازندہ - دوسرے کا نواندہ - بازندہ کے دل میں سیر و سیاحت کا شوق پیدا ہوا - اپنے دوست سے کہا "آؤ ہم تم مل کر دنیا کی سیر کریں کیونکہ سفر میں بے شمار عجائبات نظر سے گذرتے ہیں اور بڑا تجربہ حاصل ہوتا ہے" - نواندہ نے کہا "سفر بھالی - تم نے کبھی سفر کی محنت نہیں سہی اور غربت کی مشقت نہیں اٹھائی - اگر تم اس سے واقف ہوتے تو ہرگز ایسا فضول ارادہ نہ کرتے" - بازندہ بولا "یہ تو سچ ہے" کہ سفر میں تکلیف ہوتی ہے لیکن نگہ چیزوں کے دیکھنے اور نئے لوگوں سے

ملنے کے بعد انسان یہ تمام کلفتیں بھول جاتا ہے - اس  
وقت مصیبت بھی راحت معلوم ہوتی ہے “ \*

3. Explain :—

10

اور عشرت کی تمنا کیا کریں  
سامنے تو ہو تجھے دیکھا کریں  
محو ہو جائیں تصور میں ترے  
ہم بھی اپنے قطرے کو دریا کریں  
ہم نہیں ہیں واقف رسم ادب  
دلکی بے تابگی کو رحشت کیا کریں

4. Write an essay in Urdu on one of the following subjects :—

3

- (i) Insurance and its advantages.
- (ii) Weaving in India—past and present.

(iii) گلی میں یار کی اے شاد سب مشتاق بیٹھے ہیں  
خدا جانے وہاں سے حکم کس کے نام آئے گا

—



## MALAYALAM COMPOSITION

*Paper-Setter*—MR. K. ZACHARIAH.

*Examiner*—MR. C. F. ABRAHAM.

*The figures in the margin indicate full marks*

1. Translate *any one* of the following passages into idiomatic English :— 20

(a) നിയമ സഭയുടെ ബഡ്ജറ്റു സമ്മേളനം കഴിഞ്ഞു കൂടിയിരിക്കുന്നു. സംഭവശൂന്യമായ ഈ സമ്മേളനത്തെ പറ്റി എന്താണു പറയേണ്ടതെന്നു ഞങ്ങൾക്കു നിശ്ചയമില്ല. ഉദ്യോഗസ്ഥഭാഗത്തു നിയമ സഭയെപ്പറ്റി ഒരു അനാദരവും നിരുത്തരവാദമുമാണു പ്രത്യക്ഷപ്പെട്ടതെങ്കിൽ അനുദ്യോഗസ്ഥമെമ്പർമാരുടെ പക്ഷത്തു എന്തെന്നില്ലാത്ത നിരാശയാണുണ്ടായത്. എന്നതന്നെയുമാത്രം ഗൗരവമായ ഒരു കൃത്യമാണ് തങ്ങൾ നിർവ്വഹിക്കുന്നതെന്നുള്ള ബോധമോ തങ്ങളുടെ പ്രവൃത്തികളെ അനേക സഹസ്രം നയനങ്ങൾ സൂക്ഷ്മമായി വീക്ഷിച്ചുകൊണ്ടിരിക്കയാണെന്നുള്ള വിചാരമോ അനുദ്യോഗസ്ഥമെമ്പർമാർക്കു കറവായിരുന്നെന്നും സമ്മതിക്കേണ്ടിയിരിക്കുന്നു.

(b) നാടൊട്ടു വ്യാപിച്ചിരിക്കുന്ന പണത്തിനുള്ള ഭൗർലുഭ്യം എത്രയാണെന്നു നാനാതരക്കാരും രാജ്യത്തിന്റെ വിവിധ ഭാഗങ്ങളിലുള്ളവരുമായി ദിനപ്രതി ഇടപെട്ടു കൊണ്ടിരിക്കുന്ന ഞങ്ങൾക്കു നല്ലവണ്ണമറിയാം. സാമാനങ്ങൾ കുറഞ്ഞ വിലക്കു കിട്ടുമ്പോൾ അപേതനമായ സ്വപ്നവും വെള്ളിയും കറയുന്നതിലെന്തെന്നെന്നു തത്വജ്ഞാനികൾ ചോദിച്ചേക്കുമെങ്കിലും കർഷകപ്രധാനമായ ഈ രാജ്യം ഇന്നു തരണം ചെയ്യേണ്ടിവന്നിരിക്കുന്ന

വിഷമമൂലം ചിന്താശീലന്മാരായവരെ സ്തംഭിപ്പിക്കുവാൻ പശ്ചാച്ഛാമാണെന്നു പറയാതെ തരമില്ല. അതിനാൽ സകല ആദായമാർഗ്ഗങ്ങളേയും വളർപ്പിക്കുകയും അതേസമയം തന്നെ വ്യയമാർഗ്ഗങ്ങളെ ചുരുക്കുകയും ചെയ്യുന്നതിൽ ജാഗരൂകരായിരിക്കുന്നവരിൽ നിന്നു വിചാരിച്ചുടത്തോളമുള്ള പ്രോത്സാഹനം തെങ്ങക്കുറുക്കു ലഭിച്ചില്ല.

2. Translate *any two* of the following passages into Malayalam :—

40

(a) We have no hesitation in recording our belief that the greatest hope for the salvation of the rural masses from their crushing burden of debt rests in the growth and spread of a healthy and well-organised co-operative movement based upon the careful education and systematic training of the villagers themselves. Thrift must be encouraged by every legitimate means, for the savings resulting from the thrift of the cultivating classes form the best basis of the capital they require.

(b) Over-production of goods and raw materials, over-capitalization of railways, and feverish speculation in all sorts of corporate enterprise brought financial panics. During the hard times that followed, labour expressed its dissatisfaction by strikes of unparalleled violence. It was a period of cut-throat competition in which the big fish swallowed the little fish and then tried to eat one another.

(c) The Stock Exchange is only a department of the money market. The commonest way of hiring money for business purposes is to keep an account at a bank and hire spare money there when you want it. The bank manager will lend it to you if he feels reasonably sure that you will be able to repay him; in fact, that is his real business. He may do it by letting you overdraw your account.

3. Write an essay in Malayalam on *one* of the following topics :—

40

- (a) The uses and limitations of technical education.
- (b) Trade Unions and their proper functions.
- (c) The problem of the 'depressed classes.'

## TAMIL COMPOSITION

*Paper-Setter and Examiner*—RAO BHABADUR L. K. ANANTHA  
KRISHNA IYER, B.A., L.T.

*The questions are of equal value.*

1. Translate into Tamil *any two* of the following passages :—

(a) As economically, the railway is length with little breadth, in undeveloped countries it can only be looked upon as an artery, depending for its freight on the roads and tracks which converge upon it. If these roads and tracks be few in number, generally speaking, freights will be insignificant, and the railway in place of fostering wealth, will swallow it up or stifle it. The

railway must, therefore, be skirted by a network of roads. The cheapest form of road is a rough cart track, and where the country consists of grass land and the rainfall is low, as in South Africa, extensive use can be made of bullock carts for purposes of transportation. The bullock wagon has reached, however, the zenith of its evolution, and is by no means suited for countries where grazing is difficult. If fodder has to be carried in bulk, it at once becomes an uneconomical means of movement. If the country to be traversed is unsuited to this form of transport, we are left with the lorry.

(b) With the evolution of man, and in the course of ages, the distribution of forests was profoundly affected. At first the progenitors of Man were insignificant individuals, wandering in the depths of primeval and gigantic forests on which they were dependent for the necessities of existence. The forest was their home and the trees of the forest their gods. But gradually Man became gregarious, collected into tribes and communities, and started an agricultural and pastoral existence, clearing the land in ever widening circles for cultivation and grazing. The destruction of forests was not however uniform, but varied directly with the stage of civilization reached. The destruction of forests went on in all countries with the expansion of civilization. In this process Man forgot the great importance of forest products to civilization itself. Modern civilization is largely dependent on forest products and a definite area of land under forest is an economic and physical necessity for the well-being of every progressive country.

(c) Several measures can be suggested for combating the poverty evil. Besides introducing improvements in the methods of agriculture and extending the cultivated area, every effort should be made to diversify the occupations of the people. The Government and the people should join hands in establishing manufactures of all sorts—large-scale industries as well as small handicrafts and cottage industries. Greater moderation in the assessment of the land revenue, together with less rigidity in its collection during bad years, a definite limitation of the share of the State in the income derived from land, will ensure the cultivator the fruits of his labour and greatly improve his economic condition. Emigration, if properly organised, will appreciably help to relieve the pressure of population on the soil. The extension of co-operative credit will be very useful in checking the indebtedness and promoting thrift among villagers. The establishment of Arbitration Courts will decrease ruinous litigation. And, lastly, it is to be hoped that the leaders of the people will take active steps to root out evil customs wherever prevalent.

2. Write an essay in Tamil on any two of the following subjects :—

- (a) The Handloom Industry.
- (b) Railways and Economic Progress.
- (c) The Indian Village.

## GERMAN COMPOSITION

*Paper-Setter*—DR. STELLA KRAMRISCH, D.LITT.

*Examiner*—DR. REV. P. JOHANNES, S. J.

*The figures in the margin indicate full marks.*

1. Translate into English :—

25

Meine Mutter, Frau von Schnabelewopke, gab mir, als ich Nerauwuchs, eine gute Erziehung. Wie oft als Knabe versäumte ich die Schule, um auf den schönen Wiesen von Schnabelewopke einsam darüber nachzudenken, wie man die ganze Menschheit beglücken könnte. Man

Nat mich deshalb oft einen Müziggänger gescholten und als solchen bestraft; und für meine Weltbeglückungso gedanken umolte ich schon damals vid Leid und Not adulden. Die Geyend non Schuabelewops ist übrigens schr schön, es flieszt dort ein Flüsschen worin man des Sommers schr angenehm baolet anch gibt es allerliebste Vogeluester in den Jehölzendes Nfers. Das alte Gnesen, die chemalige Hauptstadt von Polen, ist mor drei Meilen dovon eubgant.

2. Translate into English :—

25

The Preiscourant ist uns diesen Morgen zugekommen und wir eutnehmen darans, dasz sich Thre Preise ab Hütte verstehen.

Wir sind mit den kontinentalen Frachtverhältnissen nicht vertrant, und es wäre uns lieber, wenn Sie für uns immer frei an Bord Hamburg quotieren wollten.

Wir können Thuen diesen Monat unr 6 Tonnen Drahtstifte, Grösze No. 4 abnehmen; hoffen aber, bald bedeutendere Geschäfte mit Thuen machen zu können.

Da dies unser erstes Geschäft ist, schlieszen wir Rimessen auf Hamburg bis und verweisen Sie bezüglich Referenzen au unsere Bank, die London and County Bank, Hull, und au die Herren Schmederer und Flügel, Hamburg.

Wir sind überzeugt, dasz diese Häuser Thuen alle gewünschte Anskunft ertislen werden. Wir arbisten mit dreimonatlichem Kredit und erwarten, dasz auch Sie uns einen solchen eiräumen werden.

Hoch achtung voll

Sunth & Hammonol.

3 Translate into German :—

26

Referring to my letter of this morning, I ..... We regret to have been without any communication from you since your favour of August 12th of last year.—I consider you to be in possession of my letter of Monday last, and am still awaiting an answer. We confirm our letter of the 1st inst. and as we are still without your reply ... —In continuation of my letter of the day before yesterday, I beg to inform you that .....

4. Write an essay in German about the striking characteristics of one of the large cities of Germany, such as Berlin or Munich.

27

## FRENCH COMPOSITION

*Paper-Setter*—DR. PRABODHCHANDRA BAGCHI.

*Examiner*—MR. N. N. CHANDRA, M.A.

*The figures in the margin indicate full marks.*

1. Translate the following into English :—

40

(a) Voyez quelle folie d'aller vous chercher, d'aller vous attendre à Breslau ! vous y serez occupé du roi, des troupes de vos succès, etc., etc., et rien ne vous portera à jeter vos regards vers Paris. J'ai tort, Paris est bien grand, mais vous m'y laisseriez dans la foule. Cependant croyez-moi, il y a peu, mais très peu, et si je ne craignais de vous affliger, je vous dirais : il n'y a personne qui vous regrette plus sincèrement que moi.

(b) J'en suis bien fâchée, mais, mon ami, pourquoi me demandez-vous l'impossible ? donnez-moi l'occasion de vous être utile dans ce que

vous croirez juste, je vous réponds que cela ce fera, et sans que je m'en mêle : vous n'aurez qu'à parler. Si vous saviez ce qu'il m'en coûte pour vous cacher quelque chose !... Bonjour. Si je n'ai pas une lettre demain, il n'y a point de justice à attendre de vous.

2. Translate the following passages into French :—

30

(a) There were at this time two parties in the State, one was powerful and the other was very feeble. The King's object was to help the weak party. Accordingly, golden images of the leader of the second party were secretly made and placed in the public places by night. The next morning the people were full of admiration for the beautiful images.

(b) My dear friend I am gone ! My loss in the transactions of the last two years is heavy and I cannot hope to make that up in the near future. My credit in the market is ruined. I am compelled to apply for insolvency. It is not possible for me to pay even 25% of my debts to you. I hope you will have sympathy for your old friend and wait till better days come.

3.

*Either,*

30

Draw up a report, in French, to be submitted to the French Trade Commissioner in Calcutta about the possibilities of the French trade in the local market.

*Or,*

Write a letter in French, on behalf of your firm, to its Commercial agent in Marseilles, asking him to secure orders for Indian hats from the dealers in Abyssinia and French Indo-China. Intimate also to him the conditions under which your firm is prepared to carry on business with those dealers.

## GENERAL ECONOMICS

*Paper-Setter*—SIR J. C. COYAJEE, KT., B.A., LL.B.

*Examiner*—MR. MOHINIMOHAN CHAUDHURI, M.A.

*The questions are of equal value.*

*Six questions only to be attempted.*

1. Indicate the scope of Economics, and examine the relation between Economics and the sciences of Politics and Ethics.

2. "Value, supply, and demand are inter-dependent." Explain this statement carefully.

3. Explain the economic theory of Rent, and show what relation Rent bears to the cost of production.

4. Distinguish between Profits and Interest, and analyse the former into their main elements.

5. Account for the differences of wages (a) as between different countries, and (b) as between different occupations.

6. Account for cyclical trade fluctuations, and show how the recurrence of over-production is connected with the nature and character of the present system of production.

7. Discuss carefully the relation between the supply of money and the level of prices.

8. Discuss the functions of banks, and describe the services rendered to a country by its banking system.

9. Show how banks possess the power of manufacturing credit so as to increase currency. What are the limits to this power?

10. Explain the meaning of "comparative cost of production" as the principle governing International trade.

## INDIAN ECONOMICS

*Paper-Setter*—MR. SATISCHANDRA RAY, M.A.

*Examiners*— { PROF. P. N. BANERJEE, M.A., D.Sc. (LOND.).  
                   { DR. NALINAKSHA SANYAL, M.A., Ph.D.

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions are of equal value. Attempt only six questions.*

1. What constitute the natural resources of India? Enumerate some of the principal commercial agricultural products. What are their industrial uses, and what part do they play in her external commerce?
2. Give a brief description of the indigenous system of Indian Banking and the methods by which it finances internal trade.
3. Indicate briefly the present currency policy of the Government of India adopted on the recommendations of the Hilton-Young Committee of 1926.
4. Taxes are levied both for revenue as well as for social purposes. Give examples from the Indian system.
5. What are the implications of the theory of State-landlordism in India? Criticise this theory.
6. Does the Government intervene in the organisation of internal trade of India? If so with what results?  
     Give the main features of the organisation of the Jute trade.
7. Summarise the reasons for the depression of jute industry of Bengal, and suggest remedies for the future.
8. Explain what is meant by "discriminating protection." To what industries has this principle been applied, and for what reasons?
9. Enumerate the special functions of the Central and Provincial Co-operative Banks. Have you any reasons to believe that the Co-operative movement in Bengal has not been as successful as was anticipated at their inception?
10. Indicate the different stages in organising relief measures during famines. Explain the object and significance of each of these organisations.
11. Discuss the advantages of a Central State Bank for India. What are the grounds that led to the proposal of establishing such a Bank in 1927?

## ACCOUNTANCY

*Paper-Setter*—MR. S. N. MUKHERJEE, M.A.

*Examiner*—MR. NARENDRANATH SARKAR, M.A.

*The questions are of equal value.*

*Answer any six questions.*

1. From the following schedule of balances of Liberty Contractors, Ltd., prepare Trading and Profit and Loss A/c for the half year ended June 30th, also Balance Sheet as on that date :—

					Rs.
Share Capital (10,000 shares of Re. 1/- each, -/8/- called)	...	...	...	...	5,000
6% Debentures issued 1st Jan. ...	...	...	...	...	4,500
Debtors ...	...	...	...	...	4,250
Bank Overdraft ...	...	...	...	...	1,750
Bills Receivable ...	...	...	...	...	1,492
Goodwill and Patent Rights ...	...	...	...	...	4,000

					Rs.
War Loan Investments	...	...	...	...	600
*Creditors	...	...	...	...	4,246
Machinery and Plant	...	...	...	...	6,000
Preliminary expenses	...	...	...	...	124
Calls in arrear	...	...	...	...	200
Calls paid in advance	...	...	...	...	400
Stock 1st Jan.	...	...	...	...	1,709
Work in progress 1st Jan.	...	...	...	...	685
Cash in hand	...	...	...	...	86
Wages	...	...	...	...	6,184
Salaries of office staff	...	...	...	...	834
Postages and Telephone	...	...	...	...	54
Rent, Rates and Taxes	...	...	...	...	95
Stationery and Printing	...	...	...	...	31
Office expenses	...	...	...	...	17
Materials purchased	...	...	...	...	2,486
Bills payable	...	...	...	...	2,815
Royalties on Patents (received)	...	...	...	...	287
Sales	...	...	...	...	9,874

At 30th June, the stock of materials was Rs. 1,087, and the value of the work in progress Rs. 419. There was a contingent liability on Bills under Discount of Rs. 284. Ignore depreciation.

2. How would you treat the following in the Accounts and Balance Sheet of a Company :—

- "Collateral" Debentures issued to the Bankers.
- Loans by the Company to one of the Directors.
- Premiums on shares.
- Profits earned prior to the incorporation of the Company.

3. X, Y, and Z are in partnership sharing Profits and Losses equally. On 31st December, 1930, they decided to dissolve the partnership, on which date their position was as follows :—

*Balance Sheet.*

		Rs.			Rs.
Capital, X	...	5,000	Plant, etc.	...	5,500
" Y	...	2,500	Debtors	...	2,400
" Z	...	500	Stock	...	3,000
Loan A/c Y	...	1,000	Cash	...	100
Creditors	...	2,000			
		<u>11,000</u>			<u>11,000</u>

Y agreed to take over the stock at a valuation of Rs. 2,700. The Plant and Debtors realised Rs. 6,400. The Creditors were paid in full.

Close the Partnership books.

4. What is the average due date of the following instalments payable under a contract :—

			Rs.
June 1st	...	...	3,000
July 1st	...	...	4,200
August 3rd	...	...	1,800

Draw a bill to meet the Rs. 9,000/-, with interest at 5 per cent. thereon at 60 days from the average due date.

Or

B. Banerji has the following transactions with C. Chatterji :—

				Rs.	As.	P.
1930.						
Sept.	1.	Balance due to Banerji at this date	...	50	0	0
"	2.	Goods sold to Chatterji	...	120	0	0
"	10.	Received cash from Chatterji on account	...	100	0	0
Oct.	1.	Goods bought from Chatterji invoiced December 1st	...	80	0	0
"	10.	Goods sold to Chatterji invoiced 1st December	...	250	0	0
Decr.	1.	Drew Bill at 3 months on Chatterji for Rs. 200 and discounted same for Rs. 197/-	...			
1931.						
Jan.	10.	Sold goods to Chatterji invoiced 1st February	...	150	0	0

Make out an Account current, to be rendered by Banerji, to record the above transactions, the account to be made up to 31st January, 1931, interest at 5 per cent. per annum to be charged and allowed.

5. (a) What is meant by the term "Depreciation" ? Is it the same as ordinary wear and tear ? Explain the object of charging Depreciation in the Profit and Loss Account as an expense.

(b) Explain the following terms :—

Capital Expenditure; Capitalised Expenditure; Capital Receipts; Capital Profits; Capitalised Profits; Capital Reserve; Capital Reduction; Capital Appreciation.

6. Rama draws a Bill of Exchange on Hari on 1st February at three months for Rs. 300. Hari accepts the Bill and Rama discounts it on 4th February with the Central Bank of India, Ltd., at 6 per cent, remitting one half on the proceeds to Hari. Rama does not forward his proportion of the Bill, but Hari meets it upon the due date. Shew the transactions in the books of both Rama and Hari.

7. Prepare Journal entries to record the following transactions in the books of Everfailing Co., Ltd. :—

200 shares of £1 each, 12/6 called up, and on which 7/6 per share had been paid, were forfeited and subsequently sold to Fox, for £100, credited with 12/6 per share paid up.

8. Describe the entries necessary to record the transactions relating to a consignment in the books of both the Consignee and Consignor.

## ECONOMIC GEOGRAPHY

*Paper-Setter*,—MR. MOHITKUMAR GHOSH, M.A. (CAL.), B.COM.  
(LOND.).

*Examiner*,—DR. NALINIMOHAN PAL.

*The questions are of equal value.*

*Answer any six of the following questions.*

1. Carefully examine the geographical position of Egypt in relation to world trade routes.

2. Describe the present development of irrigation in South Africa, and examine its possibilities.



3. Consider the position of France with regard to her supplies of (a) fuel, (b) water-power.

4. Examine the influence of geographical factors on the localisation of the iron and steel industry in U.S.A.

5. Examine the growth of either the cotton industry, or the jute industry in India.

6. Discuss briefly the position of the following industries in India :—

(1) Paper-making;

(2) Match;

(3) Iron and steel.

7. Describe any six of the principal British coal-fields, and their connection with British manufacturing industries.

8. Examine and estimate the relative importance of the principal means of transportation for carrying on inland trade in India.

9. Describe the chief forest areas in India, and mention the chief industries that are mainly dependent on forest products.

## BUSINESS ORGANISATION

*Paper-Setter & Examiner*—MR. MONIKUMAR GHOSH, M.A.  
(CAL.), B.COM. (LOND.).

*The questions are of equal value.*

*Answer ANY FIVE of the following questions.*

1. Trade is sometimes divided into "Import and Export;" "Wholesale and Retail." Discuss carefully the defects of this division. Can you suggest any useful method for the classification of trade? Give full reasons.

2. What is a Limited Partnership? Compare its advantages and disadvantages with those of a Private Limited Company.

3. "The Joint Stock Company is the only form of organisation in which a permanent opposition of interests can exist." Examine this statement, and show by what devices this opposition can to a certain extent be eliminated.

4. "The financial resources of producers are not adequate to carry the whole risk of price fluctuations as well as the expenses of production." Carefully explain this statement and show how this risk is borne in the modern business world.

5. Critically examine the various methods of remunerating labour in industry.

6. Explain clearly how movements in the Bank Rate affect the price of securities on the Stock Exchange. Also show how trade is affected by a low Bank Rate.

7. Define Speculation and show how it differs from Gambling. Also carefully examine how far the speculator performs a useful function in the modern economic system.

8. "A contract of Marine Insurance is a contract founded on the utmost good faith." Examine this statement carefully and show how far it is justified.

## INLAND AND FOREIGN TRADE

*Paper-Setter & Examiner*—DR. JOGESCHANDRA SINHA, M.A., PH.D.

*The questions are of equal value.*

*Answer ANY SIX questions.*

1. "There is no essential difference between domestic and international trade and consequently no place for any special theory regarding international trade."

Comment on this statement.

2. Discuss the importance of marine insurance in seaborne trade, and distinguish in this connection between a "general average loss" and a "particular average loss."

3. What are bonded warehouses and what services do they render to persons engaged in foreign trade?

4. What are the chief peculiarities in the financing of foreign shipments by Germany?

5. Give an account of the chief methods followed in financing the export of British textile goods to India.

6. Describe the part played by (a) indigenous bankers, and (b) the Imperial Bank, in financing the inland trade of India.

7. Describe the present commercial organisation in the movement of jute from the villages to the port of Calcutta. Can you suggest any method by which some of the middlemen in this trade may be eliminated?

8. X, a merchant in Calcutta, accepts an offer from Y, a merchant in London, for supplying jute worth £10,000 at 3 months' credit. Is there any method by means of which X can get cash against shipment? Describe also how the money is ultimately paid by Y. Answer this questions, as fully as you can, giving all necessary details.

9. Account for the changes in the direction of India's foreign trade, as indicated by a comparison between the latest trade statistics and those for the period immediately before the War.

10. Write notes on any three of the following :—

- (a) Consular invoice,
- (b) Trust receipt,
- (c) Letter of hypothecation,
- (d) Bill of lading,
- (e) Bill of sight.

## ELEMENTARY COMMERCIAL LAW

*Paper-Setter*—MR. PRAMATHANATH BANERJEE, M.A., B.L.,  
BARRISTER-AT-LAW.

*Examiner*—MR. SATYENDRANATH CHATTERJEE, B.Sc.,  
BARRISTER-AT-LAW.

*The questions are of equal value.*

*EIGHT questions in all to be attempted : FOUR out of each Half.*

## FIRST HALF

1. Distinguish between void and voidable contracts.

State whether the following agreements are void or valid :—

(a) A promises B in consideration of Rs. 1,000 never to marry throughout his life.

(b) *A* promises to pay a certain sum of money to *B* who is an intended witness in a suit against *A*, in consideration of *B*'s absenting himself at the trial.

2. Define consideration. What are the points of difference between the English law and the Indian law on the subject of consideration for a contract ?

3. What is bailment ? What is the extent of the liability of a Railway company in India as a bailee ? Does the liability of such a company differ in England ? If so, to what extent ?

4. Explain *any two* of the following terms :—

- (a) Quantum meruit,
- (b) Stoppage in transit,
- (c) Resale,
- (d) Del credere Agent.

5. *A* was given a power of attorney by *B* to manage *B*'s shop. *A*, who had to go out of town one day, authorized his son *C* to look after the business. *C*, who held a power from his father *A*, entered into a contract in the name of *B* and signed the same. What is the position of the parties ?

6. Distinguish between a contract of guarantee and a contract of indemnity.

7. *A* gets hold of *B*'s cheque book and forges *B*'s name on a cheque. He obtains money from *B*'s bankers by presenting the forged cheque and then disappears. Who bears the loss—*B* or the bankers ?

8. What is the position of a minor in the matter of Negotiable Instruments ?

## SECOND HALF

9. Explain :—

- (a) A drawee in case of need.
- (b) A holder in due course.

10. State the points of difference between the Memorandum of Association and the Articles of Association of a Limited Company. How can you alter the Memorandum of Association ?

11. Under what circumstances will the Court compel the winding up of a company ?

12. Define : (a) Life insurance, (b) Marine insurance. Can you assign (a) a life policy, (b) a marine insurance contract ? If so, how ?

13. Distinguish between a Charter party and a Bill of Lading. What are the warranties implied in a Charter party ?

14. Can (a) an infant, (b) a married woman, (c) a resident alien be made a bankrupt ?

15. Under what circumstances can the Court set aside the award of an arbitrator ?

16. What are the rights and duties of partners as (a) between themselves, (b) against third parties ?

## AGRICULTURAL ECONOMICS

*Paper-Setter*—DR. NAGENDRANATH GANGULI, C I.E.

*Examiners*— { PROF. NAGENDRANATH GANGULI, M.A.  
DR. N. N. GUPTA, PH.D.

## FIRST PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Answer ANY FIVE questions.*

1. With special reference to the position of the Bengal cultivator during the last six months of 1930, explain how the scarcity of money can bring a famine condition more acutely than the scarcity of foodstuff. 20
2. If Ryots as a body refuse to pay rents and taxes to their superior landlords, how can the factor affect the general condition of agriculture in a province like Bengal where the permanent settlement is in vogue. 20
3. What normal conditions are necessary to make agriculture a successful industry ? Broadly contrast agriculture with manufacturing industries. 20
4. What do you mean by rural industries ? Name a few that can profitably be allied to rural agriculture. 20
5. Write a short essay on the Co-operative movement in Bengal, and indicate how it can help the rural folk. Indicate in it also some promising lines in which this movement can be adapted. 20
6. In what respects can the agriculture of the country be improved and what are the chief factors for the improvement of agriculture in modern times ? 20

## SECOND PAPER

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Answer ANY FOUR of the following questions.*

1. Write short notes on the following crops with reference to the following points :— 25
  - (a) Acreage in Bengal approximately, (b) average outturn per acre, (c) cost of cultivation per acre, (d) average price per maund, (e) chief varieties recommended by the department of agriculture.

Crops :—Paddy, Jute, Sugarcane, Wheat.

2. What do you mean by the following : intensive crop, food crop, 25  
khariff crop, artificial manure, rural indebtedness, waste labour, rotation  
of crops? Give concrete examples wherever possible.
3. Do you think that the adoption of agriculture as a profession by 25  
the young men of Bengal can solve the problem of unemployment to any  
extent? Give reasons and facts and figures for your contention.
4. Write a short note on rural depopulation, and explain fully how the 25  
villages can be improved.
5. Give the following figures :— 25
- (a) How many Bengal bighas make one acre?
  - (b) How many pounds make one maund?
  - (c) What is the present relation of a shilling to a rupee?
  - (d) What is the average rainfall of any district in India?
  - (e) How many gallons of water are equivalent to an inch of  
rainfall per acre?
  - (f) How many maunds of jute are there in a bale?

## ADVANCED ACCOUNTANCY AND AUDITING

*Paper-Setters*—{MR. RANJIT RAY, M.A.  
,, NARENDRA K. MAJUMDAR, M.A.

*Examiners*—{MR. G. BASU, M.A.  
,, S. R. BATLIBOI.

### FIRST PAPER

*The questions are of equal value.*

*FIVE questions carry full marks, not more than THREE to be attempted from  
any Half.*

#### First Half.

1. Goods are invoiced by G to his Agent in Rangoon at selling price. The Agent reports sales made and collection of book debts by him by monthly advice. He receives 5% on Cash collected, plus an allowance for expenses at the rate of Rs. 2,000 per annum. During the half-year ended 30th June, 1930 goods were invoiced to the Agent at a value of Rs. 4,03,000. Such goods cost G Rs. 2,75,000, plus freight and charges thereon Rs. 88,700. During the same period, sales were made by the Agent amounting to Rs. 3,42,000. Debts collected were Rs. 2,88,000, and discounts were allowed amounting to Rs. 2,000. The Agent remitted to G Rs. 2,80,000.

Included in the shipments to the Agents was a consignment partly damaged by sea transit. A claim on the underwriters was settled for Rs. 6,200, which together with the proceeds of sale by the Agent, Rs. 8,800, exceeded the value invoiced by Rs. 800.

At 30th June, 1930, the stock in the hands of the Agent and unsold represents an invoice cost to G of Rs. 40,800.

Prepare, as in the books of G, Accounts showing the results of these transactions for the half-year ended 30th June, 1930.

2. The accounting year of the All-India Trading Co., Ltd., Calcutta, with Branches at Rangoon and Madras, closed on 30th April, 1931. After making all the necessary adjustments, the balances in the books of the Head Office and Branches were as follows :—

	Head Office. Rs.	Rangoon Branch. Rs.	Madras Branch. Rs.
Authorised Capital, 5,000			
Shares of Rs. 10 each ...	50,000	...	...
Subscribed and Paid-up Capital ...	30,000	...	...
Freehold Premises ...	22,000	...	...
Rangoon Branch ...	2,945	...	...
Madras Branch ...	1,155	...	...
Stock, 1st May, 1930 ...	8 000	4,000	1,500
Stock, 30th April, 1931 ...	10 500	4,100	1,050
Plant, less Depreciation ...	1,200	500	250
Fixtures and Fittings, less Depreciation ...	2,500	800	500
Creditors ...	3,540	1,250	250
Debtors ...	6,500	1,300	400
Cash in hand ...	100	50	20
Bills Payable ...	1,000	250	150
Bank Overdraft ...	4,000	900	300
Dividend, 10% ...	3,000	...	...
Head Office Account ...	...	2,945	1,155
Insurance ...	200	100	20
Insurance paid in advance ...	50	25	5
Purchases ...	16,000	6,500	2,500
Duty and charges on purchases ...	500	200	90
Manufacturing Wages ...	5,080	3,000	...
Sales ...	32,000	15,750	4,500
Discounts (Cr.) ...	300	120	50
Discounts (Dr.) ...	550	250	25
Salaries ...	4,650	2,750	550
Directors' Fees ...	500	...	...
Bad Debts ...	150	60	20
Reserve for Doubtful Debts, 1st May, 1930 ...	300	120	50
Rent of Office, etc. ...	...	1,000	350
Depreciation ...	370	130	75
Interest ...	540	370	50
General Expenses ...	600	300	100
Profit and Loss A/c, 1st May, 1930. (Cr.) ...	5,450	...	...

Prepare Profit and Loss accounts of the Head Office and Branches, and Balance Sheet of the Company.

3 On 1st July, 1925, A. B. Co., Ltd., issued Debentures for Rs. 5,00,000 redeemable at par on 1st July, 1930. It was decided to establish a Sinking Fund for the purpose of redemption.

Show the Ledger accounts for the five years assuming the annually invested amounts to earn 5% interest net, and that the amount annually set aside for the purpose is Rs. 90,487-8-0.

4. The following is the Statement of Affairs at 31st March, 1930, of Young and Old, who are in partnership, sharing profits and losses in the proportions of 2/3 and 1/3, respectively :—

From the particulars given hereunder, prepare as at 31st March, 1931, (a) a Statement of Profit, apportioning the balance between Young and Old, and (b) a Statement of Affairs as at that date :—

*Statement of Affairs as at 31st March, 1930.*

Rs.			Rs.		
<b>Capital accounts—</b>			<b>Plant and Machinery</b>		
	Rs.		Freehold	...	12,000
Young	...	20,000	Furniture	...	1,000
Old	...	8,000	Stock	...	7,000
		28,000	Sundry Debtors	...	13,090
Bills Payable	...	1,000	Bills Receivable	...	8,000
Sundry Creditors	...	12,000	Bank	...	990
			Cash	...	10
		<u>41,000</u>			<u>41,000</u>

The position as at 31st March, 1931, was as follows :—

Cash at Bank Rs. 1,500; Cash in hand Rs. 100; Sundry Creditors Rs. 19,000; Bills Payable Rs. 1,200; Sundry Debtors Rs. 16,000; Bills Receivable Rs. 2,800. The stock on hand amounted to Rs. 8,400. Young's drawings during the year had been Rs. 3,000 and Old had drawn Rs. 1,200. Young withdrew the sum of Rs. 4,000 on 30th September 1930, from his Capital account.

Depreciate Machinery and Plant by 5 per cent., Furniture by 10 per cent., and allow interest on partners' Capital at the rate of 5 per cent. per annum. Ignore interest on drawings.

**SECOND HALF**

5. The Balance on the books of the Dalhousie Club at 31st March 1931, were as follows :—

	£.	s.	d.
Furniture at 31-3-30	...	...	84 0 0
Furniture additions to 31-3-31	...	...	54 4 8
Fixtures and Fittings, 31-3-30	...	...	29 5 6
Billiard Table and Accessories, 31-3-30	...	...	89 1 6
China, Glass, Cutlery and Linen, 31-3-30	...	...	20 0 0
Stock in Restaurant, 31-3-30	...	...	9 0 11
Stock in Bar, 31-3-30	...	...	35 15 3
Restaurant Takings	...	...	1,616 17 4
Bar Takings	...	...	1,805 0 7
Billiards and sundry receipts	...	...	255 13 1
Subscriptions from Members	...	...	315 0 0
Interest on Deposit Account	...	...	8 15 6
Purchase for Restaurant	...	...	1,078 14 2
Purchase for Bar	...	...	829 9 4
Rent and Rates	...	...	342 0 11
Wages	...	...	623 8 0
Repairs and Renewals of China, Glass, Cutlery and Linen	...	...	179 18 1
Fuel and Light	...	...	175 17 2
Sundry Expenses	...	...	134 18 1
Cash in hand, 31-3-31	...	...	13 13 0
Bank Balance, 31-3-31	...	...	91 15 6
Bank Deposit, 31-3-31	...	...	288 7 2
Debtors, 31-3-31	...	...	74 18 4
Creditors, 31-3-31	...	...	178 11 5
Balance on Income and Expenditure Account at 31-3-30	...	...	462 9 8

You are required to prepare separate Trading Accounts for the Restaurant and Bar and Income and Expenditure Account for the Year ended 31st

March, 1931, together with Balance Sheet at that date, after making adjustments of the following :—

The cost of maintenance of staff is estimated at £ 275, of which £ 250 is to be credited to Restaurant and £ 25 to the Bar.

Stock at 31st March, 1931 : Restaurant, £2 6s. 5d.; Bar, £29 11s. 10d.

Depreciation : Furniture, 10 per cent.; Fixtures and Fittings, 5 per cent.; Billiard Table and Accessories, 15 per cent.

6. The following extract of costing information relates to a commodity for the six months ended 30th June, 1930 :—

	Rs.
Purchases—Raw Materials ... ..	80,000
Direct Wages ... ..	25,000
Rent, Rates, Insurance and Works on cost ... ..	10,000
Stock, 1st January, 1930—	
Raw Materials ... ..	5,000
Finished Product, 1,000 tons ... ..	4,000
Stock, 30th June, 1930—	
Raw Materials ... ..	5,560
Finished Product 2,000 tons ... ..	8 000
Work in progress, 1st January, 1930 ... ..	1,200
Work in progress, 30th June, 1930 ... ..	4,000
Cost of Factory Supervision ... ..	2,000
Sales, finished product ... ..	75,000

Advertising, discounts allowed, and selling costs amount to annas four per ton sold.

16,000 tons of the commodity were produced during the period.

You are required to ascertain—(a) The value of the raw materials used; (b) The cost of the output for the period; (c) The cost of the turnover for the period; (d) The net profit for the period; (e) The net profit per ton of the commodity.

7. From the following balances of the Hindu Family Mutual Life Assurance, Ltd., as at 31st December, 1930, prepare a Revenue Account for the year ended 31st December, 1930, and a Balance Sheet as at that date.

	Rs.
Mortgages on Property in British India ... ..	9,80 000
Loans on Policies with their surrender value ... ..	8,04 100
Deposit in Government Paper with the Controller of Currency ... ..	2 00 000
India Government Securities ... ..	49,00,000
Other authorised investments ... ..	20,50,000
Railway and other debentures ... ..	33,62,000
Business Premises ... ..	8,00,000
Reversionary Interest* purchased ... ..	14,000
Agents, Balances ... ..	20,000
Outstanding Premiums ... ..	70,000
Outstanding interests and dividends ... ..	12,000
Interest accrued, but not payable ... ..	1,70,000
Cash in hand and at bank ... ..	45,000
Claims admitted but not paid ... ..	1,03,000
Creditors for income-tax, commission, etc. ... ..	50,000
Surrender Values unclaimed ... ..	5,000
Profit on sale of investments ... ..	9,80,000
Life Assurance and Annuity Fund, 1st January, 1930 ... ..	1,15,51,000
Premiums, less Re-assurances ... ..	10,60,100
Consideration for annuities granted ... ..	27,000



	Rs.
Claims under Policies paid and outstanding—	
By death ... ..	4,40,000
By Maturity ... ..	2,04,000
Annuities ... ..	6,000
Surrenders ... ..	60,000
Bonuses in reduction of premiums ... ..	14,000
Interests, dividends and rents ... ..	6,27,000
Income-tax on above ... ..	59,000
Commission ... ..	81,000
Expenses of management ... ..	1,05,000
Amounts transferred to Investment Reserve ... ..	30,0,000
Life Assurance and Annuity Fund at 31st December, 1930 ... ..	1,29,79,100

The results of the triennial valuation of liabilities at 31st December, 1930, disclose a liability under assurance and annuity contracts of Rs. 1,13,99,000. What is the significance of this figure in connection with the above accounts?

8. The Directors of a Limited Company propose, on the strength of a large balance at the Bank, to pay an interim dividend, subject to your approval as Auditor. Assuming that interim accounts have not been prepared, state what steps you would take before expressing an opinion on the proposal.

9. In what circumstances and by what authority may a Limited Company pay interest out of Capital? What statutory obligation in relation to their accounts is imposed on Companies who have made such payment of interest?

## SECOND PAPER

### (AUDITING)

*The questions are of equal value.*

*Answer ANY SIX questions.*

1. Submit a *pro-forma* Balance Sheet containing the following :— (a) Payment made in advance of the current year, (b) a Contingent Liability, (c) a Suspense Account, (d) Reserve for Bad Debts, (e) Reserve for discount on Book Debts, (f) Uncalled Capital of 50%.

Describe your duties, as auditor, with reference to the entries you submit.

2. State how the investments by a Limited Company should (1) be valued, and (2) stated in the published Balance Sheet when they are held for the following purposes :—

(a) Investment of the reserve fund, (b) Interest in subsidiary companies for trade purposes (c) Temporary investment of working Capital otherwise unemployed, (d) Pledged security for a Bank Loan.

3. The Articles of Association of a limited Company state that the Managing Director is entitled to a commission of 2½% on the net trading profits and the Directors to a commission of 5% on the net divisible profits. As auditor to the Company, state briefly the principles that would guide you when verifying the amounts charged in the annual accounts under the articles quoted above. Illustrate your answer by means of *pro forma* accounts.

4. Describe and contrast (a) a Reserve which is a charge against profit, and (b) a Reserve which is an appropriation from profit. Give an illustration of a reserve of each class, and state how they should appear in the accounts of a Limited Company and describe, as auditors, your duties in relation thereto.

5. Name and describe the uses of the books (other than the ordinary financial books) which Limited Companies are under statutory obligation to keep. State the duties (if any) of an auditor with reference to all or any of the books you describe.

6. As auditor of a company, what are your duties as regards checking the stock valuation, when the directors do not want the words "as certified" to appear on the Balance Sheet?

7. What is the difference between Capital and Revenue profits? Is Capital Profit divisible among the shareholders of a Limited Company?

8. Is an auditor under any obligation to satisfy himself as to the adequacy of the provision made for bad and doubtful debts, and what steps would you take to satisfy yourself that the book debts are good or not?

9. The Directors of a limited Company, of which you are the auditor, desire to pay an interim dividend and ask your advice.

Describe the procedure you would recommend your client to adopt before declaring the dividend.

## BANKING AND CURRENCY

*Paper-Setters*— { MR. A. C. SENGUPTA, M.A.  
DR. HARISCHANDRA SINHA, M.Sc., PH.D.

*Examiners*— { MR. B. RAMCHANDRA RAO, M.A.  
DR. HARISCHANDRA SINHA, M.Sc., PH.D.

### FIRST PAPER

*The questions are of equal value.*

*Answer six questions only.*

1. What do you understand by the Clearing House system? What are its advantages? Explain the working of the system in this country.

2. Indicate the recent changes in the laws relating to Bank notes in England.

3. How are the current accounts of—

(a) a partnership;

(b) two or more persons, not being partners, but having a joint account;

(c) an Agent;

with a Bank operated in India?

4. If you are working in a bank, what particulars will you devote your attention before passing a cheque for payment? Give your reasons.

5. In discounting bills for a customer, what are the points a banker should consider?

6. What do you understand by specie points? When are they effective? How do you account for the fluctuations of the German 'mark' beyond specie points after the Great War? How were exchange rates of German marks with foreign currencies determined then?

7. "The discount rate has thus an important bearing on the foreign exchanges." (*Withers.*) Explain.

8. Explain in what different ways funds can be remitted from one place to another in India.

9. Write short notes on :—

- (a) Endorsement in blank.
- (b) General crossing of a cheque.
- (c) Special crossing of a cheque.
- (d) A cheque crossed "not negotiable."

## SECOND PAPER

*The questions are of equal value.*

*Answer ANY SIX questions.*

1. "An extension of hire-purchase or instalment-selling system represents but a process of inflation." Discuss.

2. Explain clearly the meaning of *any five* of the following :—

(a) aval; (b) accommodation bill; (c) arbitrage in foreign exchange; (d) "nostro" and "vostro" accounts; (e) gold bullion standard; (f) "exchange as per indorsement" bill; and (g) ref-ree in case of need.

3. (a) What is the connection between international indebtedness and the market rate of exchange?

(b) Explain why the Calcutta bankers' selling rates for I.T. and O. D. are the same at present.

4. "There is a constant interaction between the rate of discount prevailing in a country and her foreign exchange." Fully discuss this statement, bringing out the nature of the interaction.

5. (a) Under what circumstances does the rate of exchange (i) rise above the upper specie point, and (ii) fall below the lower specie point?

(b) What are the principal causes of the export of bullion from a country?

6. Define "Par rate of Exchange", and mention any two "Parities", which now differ from their quotations in 1920, explaining briefly the basic reason for the new quotations.

7. (a) Explain fully the maxim, 'Buy high, sell low.' When is this maxim not applicable?

(b) What do you mean by the expressions 'favourable' and 'unfavourable' in connection with foreign exchanges?

8. The exchange rate between the Argentine gold peso and the £ sterling for immediate T.T. is, say, 46½d., and, by law, 44 gold pesos are equivalent to 100 paper pesos.

Assuming that the mail-time between Buenos Aires and London is 30 days, and that the rate of discount applicable is 4½ per cent. per annum, work out an exchange between the paper peso and the £ sterling in the form of 90 d/s draft on London. Allow for days of grace, but stamps may be ignored.

9. Given a spot rate of exchange Calcutta on London of 1s. 5½d., calculate the three months' forward rate of exchange. (Rate of interest in London is 4 per cent. per annum and in Calcutta 6 per cent.)

10. What is the meaning of the expression "Tel Quel Rate"? If the 3 months' rate Paris on London were 125·70 and the discount in Paris were 5½ per cent. per annum, find the tel quel rate for a 2 months' bill for 3,000 francs, and show what would have been the sterling value at that rate.

## MODERN ECONOMIC HISTORY

*Paper-Setters*—{ Mr. BHUJANGABHUSHAN MUKHERJEE, M.A.  
 ,, ROHINIMOHAN CHAUDHURI, M.A.

*Examiners*—{ Mr. HARISADHAN CHATTERJEE, M.A.  
 Dr. JITENDRAPRASAD NIYOGI, M.A., Ph.D.

## FIRST PAPER

*The questions are of equal value.*

*Answer any six questions.*

1. Trace the causes which led to the ultimate break-up of the Manorial system in England.
2. What was the nature of craft-guilds in England ? Indicate the methods by which they sought to achieve their ends.
3. Indicate briefly the socio-economic effects of the factory system in England, and show how far it upset the regional balance of power in the country.
4. What were the causes which led to the decline in English agriculture since 1875 ? How far do you think these causes were responsible for the rural depopulation of England ?
5. Explain the doctrine of *Laissez faire*, and indicate the causes which led to its ultimate abandonment in England.
6. How far do you think the financial policy of Pitt was responsible for the growth of public debt in England ? Explain in this connection his policy of a sinking fund for the repayment of debt.
7. Give a brief account of the movement for Tariff Reform—initiated by Chamberlain in 1903—as a revolt against the doctrine of one-sided free trade in England.
8. What were the Navigation Acts ? How far did they achieve the end in view ? Discuss, in this connection, their economic and political effects.
9. How far, and in what ways, did the Great War of 1914 affect the banking and monetary organization in Great Britain ?
10. Is there any relation between Trade Unions and Guilds ? How far do you think the Trade Unions have given a better and higher status to labour ?

## SECOND PAPER

*The questions are of equal value.*

*Answer any six questions*

1. Give an account of the various discriminating measures passed by the East India Company to promote British trade in India.
2. Describe the nature of transit duties levied by the East India Company on Indian merchandise. How did they affect the trade and industries of India ?
3. Trace briefly the history of the development of tea industry in India. What were the various measures adopted by Government for the recruitment of labour for this industry ?
4. Discuss the adequacy of the various measures passed by Government to protect the interests of the tenants in India.
5. What were the circumstances that led to the adoption of a policy of discriminating protection in India ? How far has this policy been successful ?

6. Why is it that agricultural income in India has been exempted from the payment of income-tax ? Were there occasions when this income was subjected to this tax ?

7. What are the causes of the recent industrial unrest in India ? Do you think that the Trade Disputes Act of 1929 will offer a satisfactory remedy for labour troubles in India ?

8. Give an idea of the difficulties experienced by Government in improving Indian agriculture.

9. What do you know of the Meston Award ? How has it affected the finances of the provinces ?

10. Briefly indicate the circumstances that led to the establishment of the gold exchange standard in India. Why did this standard break down during the last war ?

## ECONOMICS OF TRANSPORT

*Paper-Settlers*— $\left\{ \begin{array}{l} \text{SIR CHARLES STEWART WILLIAMS.} \\ \text{MR. MOHITKUMAR GHOSH, M.A. (CAL.).} \\ \text{B.COM. (LOND.)} \end{array} \right.$

*Examiners*— $\left\{ \begin{array}{l} \text{MR. MOHITKUMAR GHOSH, M.A., (CAL.), B.COM.} \\ \text{(LOND.)} \\ \text{DR. NALINAKSHA SANYAL, M.A., PH.D.} \end{array} \right.$

### FIRST PAPER

*The questions are of equal value.*

*Answer any FIVE of the following questions.*

1. Distinguish carefully between :—  
(a) Capital and Revenue Expenditure.  
(b) Gross and Net Receipts.  
(c) Terminal Charges and Conveyance Charges.
2. What are the main features of the Railways Act, 1921 ?
3. Discuss fully how far the separation of Railway Finance from the General Finance of this country has secured the advantages claimed by the Acworth Committee for this arrangement.
4. Examine closely the relative advantages and disadvantages of the Motor Omnibus and the Tram for the carriage of passengers in Calcutta.
5. Discuss carefully the importance and place of the Inland Waterways of Bengal in the general transport system of the province.
6. Explain fully the various forms of 'discrimination' occurring on railways.
7. State briefly what are the chief economic characteristics of railways.
8. What were the principal changes made in 1922 in the Classification of Goods on Indian Railways ?

### SECOND PAPER

*The questions are of equal value.*

*Answer any FIVE questions.*

1. "The Law of the Survival of the Fittest is one which does not apply to railways."

Examine this statement, and consider whether this is applicable to other means of transport.

2. "The Railway Rates should be based on the principle of cost of service." Discuss this statement, and show what element of truth it contains.

3. Examine the importance of close co-operation between Railway companies and their customers. How can this be achieved? Explain the methods employed in this country to achieve this end.

4. Discuss the extent of State control that should be exercised over railways. Compare the conditions prevailing in India in this respect with those in England.

5. "Railways constitute a striking example of the Law of Increasing Returns."

Carefully examine this statement and discuss its limitations.

6. Explain fully the meaning of the following :—

(a) The Long and Short Haul Clause,

(b) Charging what the traffic will bear,

(c) Indue Preference.

7. "Low Railway Rates are impossible unless large railway wagons are used."

Examine the truth of this statement, specially in connection with the railways and trade of India.

8. Discuss State v. Company Management of railways in India.

## PUBLIC ADMINISTRATION

Paper-Setters— { PROF. SATISCHANDRA RAY, M.A.  
 { MR. W. C. WORDSWORTH, M.A.

Examiners— { PROF. SATISCHANDRA SEN, M.A.  
 { MR. HARISCHANDRA SARKAR, M.A.

### FIRST PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions are of equal value.*

*Attempt only FIVE questions.*

1. Describe the administrative machinery of the Government of Bengal, separating the purely administrative from the financial side.

*Or,*

Describe the machinery for the administration of Justice in Bengal.

What are the nature and extent of the judicial powers exercised by executive officers?

2. Define the principles of *self-government*. To what extent are these principles applied to the government of local authorities in Bengal?

3. What are the functions of the British Parliament? What is its relation to the Cabinet?

State the characteristics of the British Cabinet.

4. Describe the procedure by which a spending department in England obtains funds for the service of the department; and indicate the nature of the control exercised over public expenditure by the Chancellor of the Exchequer, and the Comptroller, and Auditor General.

5. What were the relations between the House of Commons and the House of Lords in regard to financial matters before 1911, and how have those relations been changed since that year?

## 6. Define a Political Party.

"The Party system has grave defects; but it is indispensable in a Parliamentary system of Government." Explain.

Is there a Party Government in India?

## 7. Discuss the powers and position of the Crown in the British Constitution. Why does monarchy endure in democratic England?

## 8. What is the genesis of the Act of 1832 for the reform of the House of Commons?

Describe the nature of the reforms of 1832 and of subsequent years.

## SECOND PAPER.

*Candidates are required to give their answers in their own words as far as practicable.*

*All questions are of equal value.*

*Attempt only FIVE questions.*

## 1. Distinguish between the powers and functions of a Provincial Minister and a Member of the Executive Council.

In what way are the powers of the former fettered by the Government of India Act of 1919?

## 2. What is the procedure by which a Provincial Government obtains loan for local purposes from the Central Government, and to what purposes are these loans applied?

## 3. Indicate the sources of income of the Municipalities, and District and Local Boards in Bengal.

What are the legal restrictions upon the financial and administrative powers of municipal authorities?

## 4. Outline the main provisions of the Indian Income Tax Act of 1926.

## 5. What are the powers of a Provincial Government in regard to—

- (a) famine expenditure;
- (b) raising loans;
- (c) taxation;
- (d) legislation?

## 6. In what respects are the legislative powers of the Central Legislature of India restricted by the British Parliament?

What are the powers of, and the relations between, the two Chambers of the Indian Legislature?

7.

*Or,*

What should be the proper functions of the Second Chamber in a Legislature? What should be its composition in order that it may best perform these functions? (*Alternative with Question 6.*)

# **L. T. Examination,**

## **1931**

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### **THEORY AND PRACTICE OF TEACHING IN RELATION TO MENTAL AND MORAL SCIENCE**

*Paper-Setter and Examiner*—**MR. GANGACHARAN DASGUPTA,**  
**B.A., B.T.**

#### **FIRST PAPER**

*The questions are of equal value.*

*Answer Question 1 and FOUR others.*

1. Explain sensory motor arc automatic action, law of forward conduction, types of attention, division of labor in the cortex, effects of fatigue on nerve cells, physical bases of memory, and rhythm of attention.
  2. Trace the development of the instinct of Play from infancy to adolescence, and make out a scheme of work and play in the class-room.
  3. Show the place of Emotion and Sentiment in the character formation of school children.
  4. Discuss the psychology of Fatigue and its bearing on school life.
  5. What is the span of Perception? Discuss how you would develop it in a reading lesson.
  6. Consider the nature of school examinations in Bengal Schools. Does the system throw responsibility on the pupils in a way to develop their powers of will? Suggest remedies.
  7. Try to make a list of your most important interests in order of their strength. What interests would you develop in a boy of 14 which will be most helpful to him? Give your reasons.
  8. What use of imitation may be made in teaching (a) literature, (b) composition, (c) music, (d) good manners, and (e) morals?
  9. Discuss the following :—  
"The validity of reasoning tests depends ultimately on correct perceptions."
  10. How are the powers of memory affected by (a) lack of repetition, (b) lack of vividness in learning, and (c) by lack of the right emotional attitude towards the memory material?
  11. In a geography lesson of the lower forms of a Secondary School how would you develop the imagination of children?
  12. What are the laws of habit formation? How would you develop (a) habits of attention, (b) of speech, and (c) of study?
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## METHODS OF TEACHING SPECIFIC SUBJECTS AND SCHOOL MANAGEMENT

*Paper-Setter and Examiner*—MR. BINAYBHUSHAN SARKAR, B.A.,  
B.T.

### SECOND PAPER

*Full Marks—100*

*The questions are of equal value.*

ANSWER TWO questions from Group A and THREE from Group B, of which  
the FIFTH must be one.)

#### GROUP A

1. Write a brief note on "Play way in Education." "The tendency of all new ventures in education is to introduce play-spirit into the working of the school." Show how this has been attempted in the Montessori Scheme.
2. Justify the soundness of the principle: "Teach through as many senses of the children as you can." What are the dangers of appealing only to one sense?
3. How should a lesson be prepared? Mention the chief points that should be stressed in the notes of a lesson:
4. How would you deal with the following cases?—
  - (a) A boy is very intelligent but pays little heed to the lesson of the teacher.
  - (b) Some boy of a class has done something wrong; the teacher wants to find out the real culprit; the whole class is reticent.
  - (c) Some children do not produce home work set by a teacher.

#### GROUP B

1. What steps would you take to teach Home Geography to the beginners? How would you teach children the meaning and use of the map and give them the idea of the scale?
2. What is meant by Nature Study? Indicate the value of "Excursions" in a course of Nature Study. How would you conduct an Excursion?
3. It is generally found that the loud reading of our boys is anything but satisfactory. What are the chief defects noticed? Suggest ways for improvement.
4. Indicate your method of giving the first lesson in vulgar fraction. Explain diagrammatically the process of working out the following:—

$$\frac{2}{5} \times 3 = \frac{6}{5}$$

5. Prepare teaching notes on one of the following:—
  - (a) Sher Shah (as king and administrator).
  - (b) "Things need air to burn."
  - (c) The work of a River.
  - (d) The life-story of an old Rupee as told by itself.

## SELECTED EDUCATIONAL CLASSICS

*Paper-Setter and Examiner*—DR. SATYANANDA RAY, M.A., PH.D.

## THIRD PAPER

*The figures in the margin indicate full marks.*

1. Describe Rousseau's attitude towards bookwork. Can you hold the same view with regard to our present day educational programme? 15
2. Which one of our senses, according to Rousseau, affects us most? 15  
Is it possible to influence child life through the operation of one sense alone?
3. How will a child learn to draw if Rousseau's method is adopted by a teacher? 20
4. Do you agree with Rousseau when he states that a child should form no habit? State briefly the reasons for your agreement or disagreement. 15
5. Discuss, as fully as you can, the extent to which the present day home and school can build on "the discipline of consequences." 20
6. Criticize the following statement of John Dewey : "Rousseau said, as well as did, many foolish things. But his insistence that education be based upon native capacities of those to be taught and upon the need of studying children in order to discover what these native powers are, sounded the key-note of all modern efforts for educational progress." 20
7. To what extent was Rousseau indebted to Locke? Illustrate your answer with reference to at least two select passages from Emile. 20
8. Write an essay on— 30

*Either,*

(a) The Development of Senses in children and their training.

*Or,*

(b) Freedom and Individuality in Child Training.

SELECTED COURSE IN MODERN ENGLISH PROSE  
AND POETRY*Paper-Setter and Examiner*—REV. A. CAMERON, M.A., B.D.

## FOURTH PAPER

*The figures in the margin indicate full marks.*

## SECTION I

*Answer question 1 and two others.*

1. Explain with reference to the context, any four of the following passages :— 20
  - (a) I could play Hercules rarely, or a part to tear a cat in, to make all split.
  - (b) The nine-men's morris is fill'd up with mud;  
And the quaint mazes in the wanton green,  
For lack of tread, are undistinguishable :



# **B. T. Examination,**

## **1931**

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### **THEORY AND PRACTICE OF TEACHING IN RELATION TO MENTAL AND MORAL SCIENCE**

*Paper-Setter and Examiner—MR. J. M. SEN, M.A., B.Sc.*

#### **FIRST PAPER**

*Candidates are required to give their answers in their own words as far as practicable.*

*The questions are of equal value.*

*Attempt ANY FIVE questions.*

1. Give a brief description of the nervous system, and discuss the relation which exists between the brain and the mental activity.
2. Compare Instincts, Reflexes, and Habits and discuss the value of each of these factors in life in the up-bringing of a child.
3. Make the educational applications of the statement 'Conception without perception is empty : Perception without conception is blind.'
4. Discuss the value of (a) Suggestion, and (b) Imitation, in education of a child.
5. Define 'Character', and distinguish it from "Disposition" and "Temperament". Should a school take up the responsibility for moral instruction and character training of its pupils? If so, how should the responsibility be met?
6. In the school of the old type, repression was the rule. It is now the fashion to decry compulsion and discipline. To what extent is it possible to allow free development of the child during the course of his education in a school?
7. Discuss the practical uses of some of the modern "Mental tests."
8. Examine the causes of boredom in a class. Shew what you would do to avoid it. How would you distinguish it from mental fatigue?

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### **METHODS OF TEACHING SPECIFIC SUBJECTS AND SCHOOL MANAGEMENT**

*Paper-Setter and Examiner—MR. MANORANJAN MITRA, M.A.*

#### **SECOND PAPER**

*The questions are of equal value.*

*Answer two questions from each part.*

#### **PART I**

1. What are the determining factors of a curriculum ? Illustrate your answer by a critical examination of the existing primary and secondary school curricula.

2. What should be the aims of civic instruction in Bengal? Prepare a course of civic instruction and training suitable for the schools of Bengal.

3. Discuss the scope and purpose of the present-day movement in favour of greater freedom for children in school. Suggest ways of modifying the traditional organisation and class teaching in a secondary school in order to allow such freedom.

4. What is the value of marking as a measure of school-work? Examiners vary in the distribution of marks,—how can you reduce this variation?

Describe methods of measuring the improvement of pupils in their class work.

#### PART II

1. Attempt a classification of the offences of school children. Trace their probable causes, and suggest ways of treatment.

2. Enumerate the common physical defects of school children in Bengal. Trace their probable causes, and suggest remedies.

3. Outline the duties of a hostel superintendent.

4. What points should you bear in mind in the inspection of a school? Indicate how you would carry out the inspection, and write a report.

#### PART III

1. Write short notes on the pedagogy of reading under the heads (a) aim, (b) materials, (c) hygiene, (d) individual differences, (e) methods of teaching.

2. Prepare a scheme of work for Class VIII on *any one* of the following topics, and indicate the general procedure of work: (a) the agricultural development of Bengal, (b) specific gravity, (c) the forms of narration and sequence of tenses in English, (d) the League of Nations, (e) the monsoons.

3. Write notes on *any five* of the following: (a) the use of text-books, (b) hobbies of school children, (c) motivation of school-work, (d) home-work, (e) notes of lessons—their use and abuse, (f) vocational education in a high school, (g) self-government in a school, (h) correction of mistakes in spelling, (i) correction of mistakes in pronunciation.

4. Describe types of apparatus for teaching Arithmetic in the primary stages, and give suggestions for their manufacture.

## HISTORY OF EDUCATIONAL IDEAS AND METHODS

*Paper-Setter and Examiner*—MR. KSHETRAGOPAL DASGUPTA,  
B.A., BARRISTER-AT-LAW

### THIRD PAPER

*The questions are of equal value*

*Only six questions are to be attempted. FOUR should be selected from Group I and two from Group II.*

#### GROUP I

1. Give an account of the University of Nalanda or Vikramasila with special reference to its ideals, organization, curriculum, and methods of teaching. Can our modern universities learn anything from them?

2. What were the strong points in Athenian education? How far have we incorporated them into our educational system?

3. Write notes on *any two* of the following :—

- (a) The institution Chivalry;
- (b) The growth of mediæval universities and grammar schools;
- (c) The intellectual contribution of the Arabs in the Middle Ages.

4. Estimate the importance of the work done by Vittorino da Feltre and Melanchthon.

5. Describe the educational conditions in Europe at the time when Rousseau wrote the *Emile*. Which of his principles have been accepted and which rejected by the modern educational world ?

6. Write notes on *any two* of the following :—

- (a) The Perse School.
- (b) The Gary School.
- (c) The School at Moga.
- (d) Shantiniketan (School).

#### GROUP II

7. Describe a typical High School in Germany at the present day and compare it with one in India, pointing out features in the former that you would advocate for the latter.

8. "The problem of America has been to make citizens loyal to herself out of a heterogeneous population coming from different nationalities." Show, with special reference to the curriculum, the general tone and activities of an American Secondary School, as to how far this problem has been solved.

9. What are the salient features of the English Public School ? Do you know the grounds on which attacks have been made on it in recent times ? Can you suggest remedies ?

10. What is the Adult Education Movement ? Give an account of the work done in this connection in England and India, and suggest ways in which an impetus can be given to the movement in this country.

11. What attempts have been made, and what measure of success achieved, in introducing mass education in India ? What are the obstacles to it in (a) urban, and (b) rural areas ? Have you any suggestions to offer ?

### SELECTED EDUCATIONAL CLASSICS

*Paper-Setter & Examiner*—PROF. JNANRANJAN BANERJEA,  
M.A., B.L.

#### FOURTH PAPER

*The figures in the margin indicate full marks.*

N.B.—Answer Questions 3, 4 and 5, and either 1 or 2.

1. It has been said that Spencer undertook to shake rudely certain 15  
habitual convictions by which the profession of teaching had been long  
characterised. What were those convictions ? How did Spencer shake  
them ?

Or,

Discuss fully, after Spencer, the questions as to what knowledge fits a man for the discharge of his functions as citizen (or in other

words, for the regulation of social and political conduct) and for the enjoyments of Nature, Literature, and the Fine Arts in all their forms.

2. How does Spencer establish that throughout youth, as in early childhood and in maturity, the process of education should be one of self-instruction and the mental action induced should be throughout intrinsically grateful? 15

Or,

What are according to Spencer, the true aims and methods of moral education? Examine his views on these.

3. On what lines should the education of guardians proceed according to Plato? How does he explain the purpose of education by the Figure of the Cave? How is the revolution of the soul necessary for true education brought about according to him? 15

4. Develop the ideas embodied in the following sentences and examine them :— 20

(a) "Easy come easy go", is a saying as applicable to Knowledge as to Wealth.

(b) Like political constitutions, educational systems are not made, but grow.

(c) In the world of Knowledge, the essential Form of Good is the limit of our inquiries.

(d) Knowledge in the abstract is knowledge simply of the knowable, or of whatever that be called which is the object of knowledge; but a particular science, of a particular kind, has a particular object of a particular kind.

5. Write an essay on *one* of the following subjects :—

50

(a) Spencer as a true educational pioneer.

(b) The study of science as a necessary part of Secondary School education.

(c) Technical Education—its value and utility.

(d) The desirability and possibility of making Primary Education compulsory in Bengal.

(e) A system of education for Bengalees based on their needs and the genius of the nation.

(f) German and American Ideals on educational matter—a comparison and a contrast.

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# M. A. Examination, 1931

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## ENGLISH

### FIRST PAPER

*The questions are of equal value.*

#### First Half

*Examiner*—MR. BIJAYGOPAL MUKHERJEE, M.A.

*N.B.—Answer ANY THREE questions.*

1. Give some account of the pre-Christian poems of the Anglo-Saxon period. How far, in your opinion, do they come up to the accepted standards of epic and lyric poetry?
2. Characterise Langland as a poet, and indicate clearly the mediæval and modern elements in his poetry.
3. To what extent was early English tragedy influenced by the Senecan model? How do you account for the weakening of this influence?
4. Give a short account of the prose romances of the Elizabethan age, and indicate their historical importance.
5. Show your acquaintance with *any two* of the following :—  
(a) The Jew of Malta; (b) The Four P's; (c) Ralph Roister Doister;  
(d) Utopia; (e) Sir Gawain and the Green Knight; (f) Tottel's Miscellany.

#### Second Half

*Examiner*—MR. KUMUDBANDHU RAY, M.A.

*Answer ANY THREE questions.*

1. Indicate the main themes and characteristics of Caroline poetry. Give illustrative references.
  2. Write a short essay on the Comedy of the Restoration period, and show how it differs from that of the age of Elizabeth.  
*Or,*  
Compare Richardson and Fielding as novelists. How do they differ in their aims and methods from the great Victorian novelists?
  3. Write a critical estimate of *any one* of the following writers :—  
Sir Thomas Browne, Swift, Donne, Charlotte Brönte.
  4. Point out the main characteristics of pre-Raphaelite poetry, and show how pre-Raphaelitism represents a certain phase of the general romantic impulse of the age.
  5. Bring out some of the dominant features of modern English drama, with special reference to the works of Galsworthy and G. B. Shaw.
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## SECOND PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner*—MR. RAMAPRASAD MOOKERJEE, M.A., B.L.

1. 'Judged purely as a drama, King Lear cannot rank with Othello, or even Macbeth...It would therefore be more exact to say of King Lear that it is not Shakespeare's greatest play, but that it is the work which is the most stupendous expression of his genius.' Comment. 16

*Or,*

Examine how far the character of Iago is an illustration of 'motiveless malignity' (Coleridge). 16

2. 'If the School for Scandal does not tell us anything that is new or profound about human nature, it is a brilliant exposition of the character which an idle, overcivilised society develops.' Discuss and illustrate. 14

*Or,*

Analyse the character of Jaffier in *Venice Preserved* and show how the tragedy in the drama is due to it. 14

3. Explain, with reference to the context, any two passages from each of the following groups :—

A.

12

(a) Put out the light, and then put out the light:

If I quench thee, thou flaming minister,  
I can again thy former light restore,  
Should I repent me : but once put out thine.  
Thou running'st pattern of excell'ing nature,  
I know not where is that Promethean heat,  
That can thy life relume. When I have  
pluck'd thy rose.  
I cannot give it vital growth again,  
It needs must wither:—I'll smell it on the tree.

(b) Thou think'st 'tis much that this contentious storm

Invades us to the skin : so 'tis to thee ;  
But where the greater malady is fix'd  
The lesser is scarce felt. Thou'dst shunn a bear :  
But if thy flight lay toward the raging sea,  
Thou'dst meet the bear i' the mouth. When  
the mind's free,  
The body's delicate : the tempest in my mind  
Doth from my senses take all feeling else,  
Save what beats there.

(c) —pat he comes, like the catastrophe of the old comedy : my cue is villanous melancholy, with a sigh like Tom o' Bedlam.

(d) *Benedick*.—What, my dear Lady Disdain ! are you yet living ?

*Beatrice*.—Is it possible disdain should die while she has such meet food to feed it as Signior Benedick ? Courtesy itself must convert to disdain, if you come in her presence.

(e) She speaks poniards, and every word stabs : if her breath were as terrible as her terminations, there were no living near her ; she would infect to the north star. I would not marry her, though she were endowed with all that Adam had left him before he transgressed.

## B.

8

- (a) You want to lead  
 My reason blindfold, like a hampered lion,  
 Checked of its nobler vigor; then, when baited  
 Down to obedient tameness, make it couch;  
 And show strange tricks which you call signs of faith.  
 So silly souls are gulled and you get money.

(b) .....in all cases of slander currency, whenever the drawer of the lie was not to be found, the injured parties should have a right to come on any of the indorsers

(c) 'Be just before you're generous.' Why, so I would if I could; but Justice is an old, lame, hobbling beldame, and I can't get her to keep pace with Generosity for the soul of me.

## SECOND HALF

*Examiner*—MR. MOHINIMOHAN BHATTACHARYA, M.A., B.L.

1. Discuss the attitude of Benedick and Beatrice towards one another, as gradually unfolded in the course of the play. 10

Or,

Indicate the part played by Dogberry and Verges in *Much Ado About Nothing*.

2. Answer any two of the following :—

- (a) *King Richard II* :

20

I have been studying how I may compare  
 This prison, where I live, unto the world :  
 And for because the world is populous  
 And here is not a creature but myself,  
 I cannot do it; yet I'll hammer it out.  
 My brain I'll prove the female to my soul;  
 My soul, the father : and these two beget  
 A generation of still-breeding thoughts,  
 And these same thoughts people this little world,  
 In humours like the people of this world,  
 For no thought is contented. 'The better sort,  
 As thoughts of things divine, are intermix'd  
 With scruples, and do set the word itself  
 Against the word :  
 As thus,—'Come, little ones;' and then again,—  
 'It is as hard to come, as for a camel  
 To thread the postern of a needle's eye.'  
 Thoughts tending to ambition, they do plot  
 Unlikely wonders; how these vain weak nails  
 May tear a passage through the flinty ribs  
 Of this hard world, my ragged prison walls;  
 And, for they cannot, die in their own pride.

Give briefly the sense of the passage and indicate the mood of the speaker.

- (b) *The First Chorus in Henry V* :

20

O for a muse of fire, that would ascend  
 The brightest heaven of invention !  
 A kingdom for a stage, princes to act  
 And monarchs to behold the swelling scene !  
 . . . . .

But pardon, gentles all,  
 The flat unraised spirits that have dared

On this unworthy scaffold to bring forth  
 So great an object ; can this cock-pit hold  
 The vasty fields of France ? or may we cram  
 Within this wooden O the very casques  
 That did affright the air at Agincourt ?  
 O, pardon ! since a crooked figure may  
 Attest in little place a million ;  
 And let us, ciphers to this great accompt,  
 On your imaginary forces work.

Comment, on the basis of the information given in this passage, on the limitations of the Elizabethan stage.

(c) *From Marlowe's Tamburlaine the Great to Cosore, the king whom he dethroned.*

*Tamburlaine :—*

The thirst of reign and sweetness of a crown,  
 That caused the eldest son of heavenly Ops  
 To thrust his dotting father from his chair,  
 And place himself in the empyreal heaven,  
 Moved me to manage arms against thy State.  
 What better precedent than mighty Jove ?  
 Nature, that framed us of four elements  
 Warring within our breasts for regiment,  
 Doth teach us all to have aspiring minds :  
 Our souls, whose faculties can comprehend  
 The wondrous architecture of the world,  
 And measure every wandering planet's course  
 Still climbing after knowledge infinite,  
 And always moving as the restless spheres,  
 Will us to wear ourselves, and never rest,  
 Until we reach the ripest fruit of all,  
 That perfect bliss and sole felicity,  
 The sweet fruition of an earthly crown.

Give the sense of the passage and discuss how far it reflects the character of the age in which it was written.

### THIRD PAPER

*The figures in the margin indicate full marks.*

#### FIRST HALF

*Examiner—MR. AMIYAKUMAR SEN, M.A.*

1. (a) (i) Explain with reference to the context :—

20

Or I am like a stream that flows  
 Full of the cold springs that arose  
 In morning lands, in distant hills ;  
 And down the plain my channel fills  
 With melting of forgotten snows.  
 Voices I have not heard, possessed  
 My own fresh songs ; my thoughts are blessed  
 With relics of the far unknown.  
 And mixed with memories not my own  
 The sweet streams throng into my breast.

(ii) Discuss, with reference to this and other illustrative passages in Binyon's Selections, the influence of scientific thought on Modern English poetry.

Or,

(b) (i) Explain :—

‘ And when we die  
All's over that is ours ; and life burns on  
Through other lovers, other lips,’ said I  
‘ Heart of my heart, our heaven is now, is  
won !’  
‘ We are earth's best, that learnt her lesson  
here.  
Life is our cry. We have kept the faith !’  
we said ;  
We shall go down with unreluctant tread  
Rose-crowned into the darkness !... Proud we  
were  
And laughed, that had such brave things to  
say,  
And then you suddenly cried, and turned  
away.

(ii) Write, with reference to passages in Binyon's Selections, a short note on ‘Love in Modern English Poetry.’

2. (a) (i) Annotate :—

15

In Friendship false, inplacable in hate,  
Resolved to ruin or rule the state ;  
To compass this the triple bond he broke,  
The pillars of the public safety shook  
And fitted Israel for a foreign yoke ;  
Then seized with fear, yet still affecting  
fame,  
Usurped a patriot's all-atoning name.

(ii) Describe in full the character referred to in the above passage. How far is this portrait true to its original ?

Or,

(b) (i) Explain :—

For therein stands the office of a king,  
His honour, virtue, merit, and chief praise,  
That for the public all this weight he bears  
Yet he who reigns within himself, and rules  
Passions, desires, and fears, is more a king—  
  
And who attains not ill aspires to rule  
Cities of men or headstrong multitude,  
Subject himself to anarchy within,  
Or lawless passions in him, which he serves.

(ii) ‘Milton's Jesus is a Puritan.’ Examine the above statement with reference to your text.

3. ‘If the First Book (of the Faerie Queen) drew the portrait of the English Christian, (this (the second) Book may be said to draw that of the English gentleman.’ Justify or criticise the above statement. 15

Or,

(a) Sketch, after Spenser, the character of the Palmer. What is its allegorical significance ? 7

(b) Explain :—

' Before the beginning of years  
There came to the making of man  
Time, with a gift of tears ;  
Grief, with a glass that ran ;  
Pleasure, with pain for leaven ;  
Summer, with flowers that fell ;  
Remembrance, fallen from heaven  
And madness, risen from hell ;  
Strength, without hands to smite ;  
Love that endures for a breath ;  
Night, the shadow of light ;  
And life, the shadow of death.'

## SECOND HALF

*Examiner*—DR. H. C. MOOKERJEE, M.A., PH.D.

1.

*Either,*

Discuss Swinburne as a poet of the sea, illustrating your answer by quotations from or references to your text. 10'

*Or,*

Show how Swinburne's technique was a revelation, 'in comparison to whose absolute sway over verse Tennyson's perfections seem tame and studied, the impetuosity and torrent of whose passionate imagery leave the raptures of Shelley cold as the shimmer of moon-beams on still water.'

2. Give the substance of *any two* of the following, pointing out its central ideas, and add a note on its literary characteristics :— 40

A.

I.

Death, if thou wilt, fain would I plead with thee :  
Canst thou not spare, of all our hopes have built,  
One shelter where our spirits fain would be,  
Death, if thou wilt ?

No dome with suns and dews impearled and gilt,  
Imperial : but some roof of wildwood tree,  
Too mean for sceptre's heft or swordblade's hilt.

Some low sweet roof where love might live, set free  
From change and fear and dreams of grief or guilt ;  
Canst thou not leave life even thus much to see,  
Death, if thou wilt ?

II.

Man, what art thou to speak and plead with me ?  
What knowest thou of my workings, where and how  
What things I fashion ? Nay, behold and see,  
Man, what art thou ?

Thy fruits of life, and blossoms of thy bough,  
What are they but my seedlings ? Earth and sea  
Bear nought but when I breathe on it must bow.

Bow thou too down before me : though thou be  
Great, all the pride shall fade from off thy brow.  
When Time and strong Oblivion ask of thee,  
Man, what art thou ?

## III.

Death, if thou be or be not, as was said,  
 Immortal ; if thou make us nought, or we  
 Survive : thy power is made but of our dread,  
     Death, if thou be.

Thy might is made out of our fear of thee :  
 Who fears thee not, hath plucked from off thine  
     head  
 The crown of cloud that darkens earth and sea.  
 Earth, sea, and sky, as rain or vapour shed,  
 Shall vanish ; all the shows of them shall flee :  
 Then shall we know full surely, quick or dead,  
     Death, if thou be.

## B.

Beneath the shabow of dawn's aerial cope,  
 With eyes enkindled as the sun's own sphere,  
 Hope from the front of youth in godlike cheer  
 Looks Godward, past the shades where blind men  
     grobe  
 Round the dark door that prayers nor dreams can  
     ope,  
 And makes for joy the very darkness dear  
 That gives her wide wings play ; nor dreams that  
     fear  
 At noon may rise and pierce the heart of hope.  
 Then, when the soul leaves off to dream and yearn,  
 What once being known leaves time no power to  
     appal ;  
 Till youth at last, ere yet youth be not, learn  
 The kind wise word that falls from years that fall—  
 'Hope thou not much, and fear thou not at all.'

## C

She sits upon a combstone in the shade ;  
 One flake of sunlight, falling thro' the veils  
 Of quivering poplars, lights upon her hair,  
 Shot golden, and across her candid brow  
 Thus in the pleasant gloom she holds the eye,  
 Being life amid piled up remembrances  
 Of the tranquil dead.  
     One hand, dropped lightly down,  
 Rests on the words of a forgotten name :  
 Therefore the past makes glad to stay her up.  
 Closed in, walled off : here's an oblivious place,  
 Deep, planted in with trees, unvisited :  
 A still backwater in the tide of life.  
 Life flows all round ; sounds from surrounding streets,  
 Laughter of unseen children, roll of wheels,  
 Cries of all vendors—So she sits and waits  
 And she rejoices us who pass her by,  
 And she rejoices those who here lie still,  
 And she makes glad the little wandering airs,  
 And doth make glad the shaken beams of light  
 That fall upon her forehead : all the world  
 Moves round her, sitting on forgotten tombs  
 And lighting in to-morrow. She is Life :  
 That makes us keep on moving, taking roads,

Hauling great burdens up the unending hills,  
 Pondering senseless problems, setting sail  
 For undiscovered anchorages. Here  
 She waits, she waits, sequestered among tombs,  
 The sunlight on her hair. She waits, she waits  
 The secret music, the resolving note  
 That sets in tune all this discordant world  
 And solves the riddles of the Universe.

#### FOURTH PAPER

*The figures in the margin indicate full marks.*

#### FIRST HALF

*Examiner*—MR. RAJANIKANTA GUHA, M.A.

1. In noticing the *Areopagitica*, a Speech of Mr. John Milton for the liberty of unlicensed Printing, Johnson says, 'The danger of such unbounded liberty, and the danger of bounding it, have produced a problem in the science of government, which human understanding seems hitherto unable to solve.' 15

How has Milton tackled this problem ?

*Or.*

Assign the place of the *Areopagitica* in the history of Freedom of Thought. 15

2. Form an estimate of Johnson as a critic of poetry. 15

*Or.*

'Was Dryden a great poet ?' Discuss this question with reference to Johnson's views in his *Lives of the Poets*. 15

3. Elucidate the ideas underlying one of the following passages, and add a critical commentary on either its literary style or its thought :— 20

(a) God appoints to every one of His creatures a separate mission, and if they discharge it honourably, if they quit themselves like men and faithfully follow that light which is in them, withdrawing from it all cold and quenching influence, there will assuredly come of it such burning as, in its appointed mode and measure, shall shine before men, and be of service constant and holy. Degrees infinite of lustre there must always be, but the weakest among us has a gift, however seemingly trivial, which is peculiar to him, and which worthily used will be a gift also to his race for ever.

If, on the contrary, there be nothing of this freshness achieved, if there be neither purpose nor fidelity in what is done, if it be an envious or powerless imitation of other men's labours, if it be a display of mere manual dexterity or curious manufacture, or if in any other mode it show itself as having its origin in vanity,—Cast it out. It matters not what powers of mind may have been concerned or corrupted in it, all have lost their savour, it is worse than worthless—perilous,—Cast it out.

(b) The vice of the modern notion of mental progress is that it is always something concerned with the breaking of bonds, the effacing of boundaries, the casting away of dogmas. But if there be such a thing as mental growth, it must mean the growth into more and more definite convictions, into more and more dogmas. The human brain is a machine for coming to conclusions; if it cannot come to conclusions it is rusty. When we hear of a man too clever to believe, we are hearing of something

having almost the character of a contradiction in terms. It is like having of a nail that was too good to hold down a carpet; or a bolt that was too strong to keep a door shut... Man can be defined as an animal that makes dogmas. As he piles doctrine on doctrine and conclusion on conclusion in the formation of some tremendous scheme of philosophy and religion, he is, in the only legitimate sense of which the expression is capable, becoming more and more human. When he drops one doctrine after another in a refined scepticism, when he declines to tie himself to a system, when he says that he has outgrown definitions, when he says that he disbelieves in finality, when in his own imagination, he sits as god, holding no form of creed but contemplating all, then he is by that very process sinking slowly backwards into the vagueness of the vagrant animals and the unconsciousness of the grass. Trees have no dogmas. Turnips are singularly broad-minded.

## SECOND HALF

*Examiner*—PROF. J. R. BANERJEE, M.A., B.L.

*Answer Question 1 or 2, Question 3 or 4, and Question 5.*

1. *Sartor Resartus* 'is in essence a tilt against shams of every kind.' 15  
Fully develop the thought embodied in this sentence and illustrate it by references to the work.

*Or,*

It has been said of *Sartor Resartus*—"His gospel of work, of action, is here : here also is his belief in personality." Amplify and examine this statement.

2. Explain any two of the following passages :— 15

(a) Which of your Philosophical Systems is other than a dream-theorem ; a net quotient, confidently given out, where divisor and dividend are both unknown ? What are all your national Wars, with their Moscow Retreats, and sanguinary hate-filled Revolutions, but the Somnambulism of uneasy Sleepers ? This dreaming, this Somnambulism is what we on Earth call Life.

(b) Great Men are the inspired (speaking and acting) Texts of that divine Book of Revelations, whereof a Chapter is completed from epoch to epoch, and by some named History ; to which inspired Texts your numerous talented men, and your innumerable untalented men, are the better or worse exegetic Commentaries, and wagonload of too-stupid, heretical or orthodox, weekly Sermons. For my study, this inspired Texts themselves !

(c) Facts are engraved Hieroglyphs, for which the fewest have the key. And then how your Blockhead studies not their Meaning ; but simply whether they are well or ill-cut, what he calls Moral or Immoral ! Still worse is it with your Bungler : such I have seen reading some Rousseau, with pretences of interpretation ; and mistaking the ill-cut Serpent of Eternity for a common poisonous reptile.

3. "If I were asked to state in one word the cause of the failure 15  
of our civilisation, I should answer 'Secularism'." How does Dean Inge establish this ?

*Or,*

Show how Dean Inge proves that the alleged law of progress has no scientific basis whatever and that the superstition of progress has also invaded and vitiated history, political science, philosophy, and religion.

4. Explain any three of the following passages :— 15

(a) In the 'Laws' he goes further in accepting the reign of law as a necessity, though he never deviates from his conviction that it is pis



aller, as Christ said that parts of the Mosaic Law were instituted 'because of the hardness of your hearts'.

(b) Some have said that human beings are not moved by abstractions; the truth is that they are seldom moved by anything else.

(c) If 'history is a good aristocrat', science seemed to be a very heartless kind of Tory, or even a Prussian militarist.

(d) Cosmic nature is no school of virtue, but the head-quarters of the enemy of ethical nature.

(e) The historian is a natural snob; he sides with the Gods against Cats, and approves the winning side.

5. Bring out clearly the thought contained in one of the following extracts :—

20

(a) The ground of a man's joy is often hard to hit. It may hinge at times upon a mere accessory, it may reside in the mysterious inwards of psychology. It may consist with perpetual failure, and find exercise in the continued chase. It has so little bond with externals (such as the observer scribbles in his notebook) that it may even touch them not; and the man's true life, for which he consents to live, lies altogether in the field of fancy. The clergyman, in his spare hours, may be winning battles, the farmer sailing ships: all leading another life; like the poet's house-builder, who after all, is cased in stone.

'By his fireside, as impotent fancy prompts,  
Rebuilds it to his liking.'

In such a case the poetry runs underground. The observer (poor soul, with his documents!) is all abroad. For to look at the man is but to court deception. We shall see the trunk from which he draws his nourishment; but he himself is above and abroad in the green dome of foliage, hummed through by winds and nested in by nightingales. And the true realism were that of the poets, to climb up after him like a squirrel, and catch some glimpse of the heaven for which he lives. And the true realism, always and everywhere, is that of the poets: to find out where joy resides, and give it a voice far beyond singing. For to miss the joy is to miss all. In the joy of the actors lies the sense of any action. That is the explanation, that the excuse. And hence the haunting and truly spectral unreality of realistic books. In each we miss that rainbow work of fancy that clothes what is naked and seems to ennoble what is base; each is true, each inconceivable; for no man lives in the external truth, but in the warm, phantasmagoric chamber of his brain, with the painted windows and the storied walls.

(b) Character is doubtless of far more importance than mere intellectual opinion. We only too often see highly rationalised convictions in persons of weak purpose or low motives. But while fully recognising this, and the sort of possible reality which lies at the root of such a phrase as 'godless intellect' or 'intellectual devils'—though this phrase has no reality when it is used by self-seeking politicians or prelates—yet it is well to remember the very obvious truth that opinions are at least an extremely important part of character. As it is sometimes put, what we think has a prodigiously close connection with what we are. The consciousness of having reflected seriously and conclusively on important questions, whether social or spiritual, augments dignity while it does not lessen humility. In this sense, taking thought can and does add a cubit to our stature. Opinions which we may not feel bound or even permitted to press on other people, are not the less forces for being latent. They shape ideals, and it is ideals that inspire conduct. Finally, unless a man follows out ideas to their full conclusion without fear what the conclusion may be, it is impossible that he should acquire a commanding grasp of principles. And a commanding grasp of principles, whether they are public or not, is at the very root of coherency of character. It raises mediocrity near to a level with the highest talents, if these talents are in company with a disposition

that allows the little prudences of the hour incessantly to obscure the persistent laws of things. These persistencies, if a man has once satisfied himself of their direction and mastered their bearings and application, are cogent and valuable as a guide to conduct.

## (GROUP A)

## FIFTH PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner—MR. SUHASCHANDRA RAY, M. A.*

1. Explain *three* of the following extracts with reference to the context :— 21

- (i) And in his gere, for al the world he ferde  
Nat oonly lyk the loveres maladye  
Of Hereos, but lyk manye.
- (ii) He poureth pesen upon the hacches slider ;  
With pottes ful of lym they goon togider.
- (iii) Wel coude he stelen corn and tollen thries,  
And yet he hadde a thombe of gold, pardee.
- (iv) He knew the cause of everich maladye,  
Were it of hoot, or cold, or moyste, or drye,  
And where they engendred and of what humour.
- (v) Ther thise goddes laye and slepe,  
Morpheus, and Eclympasteyre,  
That was the god of slepes heyre.

2. Write notes on *three* of the following :— 9

shippes hoppesteres ; fyn scarlet reed ; a goliardeys ; the tempest at hir hoom comynge ; the kinges meting Pharao.

3. Answer *one* of the following questions :— 20

(a) Try and give a fuller sketch than what you find in the *Prologue*, of two of the pilgrims assembled at the Tabard, filling in details suggested by what they say or do on the road to Canterbury.

(b) Discuss how far typical and individual traits are combined in Chaucer's delineation of the characters in the *Prologue*.

(c) What use does Chaucer make in the *Knyghtes Tale*, of the conventional ideas of Courtly Love ?

(d) Write a note on Chaucer's manner of handling his sources.

(e) Discuss Chaucer's attitude to the Church of his times, with special reference to his portraiture of the Regular and the Secular Clergy in the *Prologue*.

## SECOND HALF

*Examiner—PROF. N. K. SIDDHANTA, M.A.*

*Either,*

1. Detail, with illustrations, the principal methods employed in English for the making of new words. 10

Or,

Write notes on :—

(a) The transition from grammatical to natural gender in English ;

and (b) the conflict of dialects in the fourteenth century.

2. Translate into Modern English prose *two* of the following 40<sup>0</sup> passages :—

(a) O blisful light, of whiche the bemes clere  
Adorneth al the thridde hevene faire !  
O sonnes leef, O Joves doughter dere,  
Plesaunce of love, O goodly deb-naire,  
In gentil hertes ay redy to repaire !  
O verray cause of hele and of gladnesse,  
Y-heried be thy might and thy goodnesse !  
In hevene and helle, in erthe and salte see  
Is felt thy might, if that I wel descerne ;  
As man, brid, best, fish, herbe and grene tree  
Thee fele in tymes with vapour eterne,  
God loveth, and to love wol nought werne ;  
And in this world no lyves creature,  
With-outen love, is worth, or may endure.

[*werne*=forbid.]

(b) O hateful harm ! condicion of poverté !  
With thurst, with cold, with hunger so confounded !  
To asken help thee shameth in thyn herte ;  
If thou noon aske, with nede artow so wounded,  
That verray nede unwrappeth al thy wounde hid !  
Maugree thyn heed, thou most for indigence  
Or s'ele, or hegge, or borwe thy despence !  
Thou blamest Crist, and seyst ful bitterly,  
He misdeparteth richesse temporal ;  
Thy neighebour thou wytest sinfully,  
And seyst thou hast to lyte, and he hath al.  
'Parfay,' seistow, 'somtyne he rekne shal,  
Whan that his [ors] shall brennen in the glede,  
For he noght helpeth needfulle in his nede.'

[*wytest*=blamest.]

(c) Tragedie is to seyn a certeyn storie,  
As olde bokes maken us memorie,  
Of him that stood in greet prosperitee  
And is y-fallen out of heigh degree  
Into miserie, and endeth wretchedly.  
And they ben versified comunly  
Of six feet, which men clepe *exametron*  
In prose eek been endyted many oon,  
And eek in metre, in many a sondry wyse.  
Lo ! this declaring oughte y-nough suffise.  
Now herkneth, if yow lyketh for to here ;  
But first I yow biseke in this matre,  
Though I by ordre telle nat thise thinges,  
Be it of popes, emperours, or kinges,  
After hir ages, as men writen finde.  
But telle hem som bifore and som bihinde

## (GROUP A)

## SIXTH PAPER

*The questions are of equal value.*

*Answer THREE questions in EACH half.*

## FIRST HALF

*Examiner—MR. RABINDRANARAYAN GHOSH, M. A.*

1. The want of lyrics was the great omission of the Augustan age. Who were the poets of the transition period by whom the omission was principally made good? Estimate the value of their lyrical contribution.
2. Discuss the appropriateness of the title of the 'Lyrical Ballads' and estimate its importance in the history of the Romantic Revival.
3. Comment on the three Yarrow poems with a view to bringing out the progressive change in Wordsworth's poetic temper and outlook as revealed in them.
4. Can you account for the speedy drying up of the poetic fountains in Coleridge? Mention and discuss the poems which may be regarded as foreshadowing this decline.
5. Write a critical note on *one* of the following topics :—
  - (a) The problem of evil in Shelley's poetry.
  - (b) Keat's use of epithets.
  - (c) Psychological subtlety in Coleridge's treatment of the supernatural.

## SECOND HALF

*Examiner—DR. SRIKUMAR BANERJEE, M. A., PH. D.*

1. Attempt a comparative study of Wordsworth, Byron, and Shelley as poets of mountain scenery.
  2. Byron, Shelley, and Keats were all the victims of premature death. Why is it that the tragedy is most poignantly felt in the case of Keats and why is he looked upon as specially an 'inheritor of unfulfilled renown'?
  3. Indicate the different aspects of Byron's genius reflected in 'Vision of Judgment' and 'Childe Harold.' What are the elements of Byron's genius that are most noticeably absent in the latter poem?
  4. Scott marks the line of transition through which mediæval romances were transformed into the stuff of nineteenth century Romanticism. Discuss the above remark in the light of a comparison between the verse-romances of Scott on the one hand and Keats's 'Lamia' and 'the Eve of St. Agnes' on the other.
  5. Show how the romantic effect is achieved in *any three* of the following works :—
 

Yew Trees (Wordsworth), Kubla Khan (Coleridge), Rosabelle (Scott), Stepping Westward (Wordsworth), Ode to Psyche (Keats), and The Skylark (Shelley).
-

## (GROUP A)

## SEVENTH PAPER

*The questions are of equal value.*

## FIRST HALF

*Examiner*—PROF. JAYGOPAL BANERJEE, M.A.

*Only THREE questions are to be attempted.*

1. Discuss with illustrative references the theories of (1) Art as Imitation, (2) Art as Communication, and (3) Art as Expression.
2. Compare the views of Wordsworth and Coleridge on the function and efficacy of metre in poetry.
3. Examine the definitions of poetry given by Wordsworth, Coleridge, and Shelley.
4. 'To say that poetry, as poetry, is moral or immoral is as meaningless as to say that an equilateral triangle is moral and an isosceles triangle immoral.' Do you accept this view?
5. 'Besides its debt to Sidney's *Apology*, Shelley's *Defence of Poetry* owes much to Plato.' Discuss.

## SECOND HALF

*Examiner*—MR. PRIYARANJAN SEN, M.A.

*Answer ANY THREE questions.*

1. 'In depicting eccentrics or persons with striking idiosyncracies, or those in the lower ranks of life, Scott displays at once an amazing fecundity and a well-nigh matchless efficacy.' Comment on this view, with special reference to Michael Lambourne and Poundtext. Show how this trait of the novelist is related to romanticism.
2. What part does the Netherfield ball play in the weaving of the story of *Pride and Prejudice*? Do you regard the *denouement* of the story as perfectly satisfactory?
3. Discuss De Quincey's relation to the English Romantic Movement, with special reference to his *Confessions*.
4. How far is Lamb, in his *Essays of Elia*, influenced by the spirit of the age?
5. 'In dealing with womanhood Landor can surpass all except the very greatest writers by the depth of his intuition, by the exquisite delicacy of his approach.' Examine this statement with reference to *The Imaginary Conversations*.

## (GROUP B)

## FIFTH PAPER

## FIRST HALF

*Examiner*.—MR. N. K. SIDDHANTA, M.A.

*The figures in the margin indicate full marks.*

1. Write a short essay on the composition of the *Anglo-Saxon Chronicle*, and indicate its literary and historical value. 10

Or,

Discuss how far *The Wanderer* and *The Seafarer* can be described as lyrical poetry. With what modern poems can you best compare them ?

Or,

Compare or contrast the prose-style of Wulfstan with that of Ælfric.

2. Any two of the following :—

20

(a) Siddan ic hīe dā geliornod hæfde, swæ swæ ic hīe forstūð, ond swæ ic hīe and;itfullicost āreccēan weahte. ic hīe on E; glisc āwende ; ond tō ælcum biſcepaðole on minum rice wille āne onsendan ; ond on ælcere bið an æstel, sē bið on fiſtegum manceſea. Ond ic bebiode on Godes naman daet nū mōnū done æstel from dære bēc ne dō, ne dā bōc from dæm mynstre ; uncūð hū longe dær swæ gelærede biſcepas ſien, swæ swæ nū, Gode done, wel hwær ſiendou

Translate the above passage ; and write a short note on the work from which this passage is taken.

(b) Ond þā salde se here him *foregislas* ond nicle āpas þæt hie of his rice uuolden ; ond him ēac gehēton þæt hiera kyning *fulwihte* onfōn wolde : ond hīe þæt geiæston swā. Ond þæs ymb iiii wiecan cōm se cyning tō him Godrum, *Þritiga sum* þāra monna þe in þām here weorþuste wæron æt Alre, ond þæt is wiþ *Æþelingga-eige*, on his se cyning þær onfēng æt fulwihte, ond his *crismlesing* was æt *Weþmōr*.

Translate into Modern English ; and write notes on the italicised words.

(c) Lēofau menn, gecna wad þæt sōð is ; dēos woruld is on ofste, and hit nēalsæcð þam ende ; and dȳ hit is on worulde ā swā leng swā wyrse, and swā hit sceal nyde for felðes *synnan* fram dæge tū dæge ær Antecristes tōcȳne yfelian swȳde ; and hūru hit wyrd þænne egeslic grimlic wide on worulde. Understaudead ēac georne þæt *deofol* þās pēode nū ſela gēara dwelode tō swȳde, and þæt lȳtle getȳwda wæron mid *mannum*, þēat hī wel spæcan.

Translate into Modern English ; and parse and decline the stems of the italicised words.

3. Translate into Modern English :—

20

Aefter þam þe Romeburh getimbred wæs viii hund wintra and ix, feng Nero to Romana anwealde, and hine hæfde xiii gear. And he hæfde gyt mā unþoawa þonne his eam hæfde ær. Gaius. Ta-eacon þam mænigfealdum biſnum þe he donde wæs, he het æt sumon eyrre onbærnan Romeburg. and bebaed his agennum mannum þæt hi simble gegripon þæs liegendan feos, swu hi mæst mihtan, and to him brohton, þonne hit man ut opbrude. And gestod him sylf on þam hyhstan torre, þe þær binnan wæs, and ongan wyrcean sceopleoþ þe þam bryne, se wæs vi dagas byrnende and vii niht. Ac he wræc his ungewealdes, ærest on pære byrig heora miedæda—and siþpan on him sylfum, þa he hine ofstang—þæt hi Petrus and Paulus gemartredan. He wæs manna ærest ehtend Cristenra manna.

## SECOND HALF

Examiner—MR. PANCHANAN GANGULI, M.A.

The figures in the margin indicate full marks,

Answer Question 1 and ANY TWO of the other questions.

1. Translate into Modern English prose :—

20

þā cūm of nōðre under misthleoþum  
Grendel gongan, Godes yrr bær ;  
nyute se mānscaca manna cyntes

sumne besyrwan in sele þæm hean.  
 Wōd under wolcnum tō þas þe hē winreced,  
 goldsele gumena gearwost wisse  
 fastum fshne Ne wæs þæt forma sif  
 þæt hē Hrōþgāres hām gesōhte;  
 næfre hē on aldordagum ær ne siþ þan  
 heardran hæle, healþegnas fand!

2. Translate into Modern English prose :—

15

Hī ðō sōmed ealle  
 ongunnon cobbetan, cirman hlūde,  
 and gristbitian Gode orleorne,  
 mid tōðon torn poligende; þā wæs hyra tīres  
 æt ende,  
 eades and enelðæda. þā eorlas hogedon  
 āweccan hira winedryhten; him wiht ne spēow.  
 þā wearð and sif and late sum to ðam ārod  
 þāra beadorinca, þæt hē in þæt būrgeteld  
 niðheard nēðde, swā hīe nȳd fordrāf.

Discuss the authorship and date of composition of the poem from which the above extract is taken.

3. Translate into Modern English prose :—

15

Byhtwold mæfelode bord hafenode  
 sēwaes eald genēat, aesc ācwehte,  
 he ful baldlice bīornas lærde :  
 'Hige sceal þe heardra, bīorte þe cānre,  
 mōd sceal þe mære. þe ure mægen lytlað.  
 hēr lið ure ealdor eall for! eāwen,  
 gōd on grēate; ā mæg gnornian  
 sē ðe nu fram pis wigplegan wendan þenceð.  
 Ic eom fīð fēores : fram ic ne wille,  
 ac ic mē be healle minum hlāfordo  
 be swā lēofan menn licgan þence.'

Write a note on "the heroic ideal" expressed in the above extract. In what way does the epic style of *The Battle of Maldon* differ from that of *Beowulf*?

4. Translate into Modern English prose :—

15

þonne onwæcneð eft winelēas guma  
 gesihð him biðforan fea!we wegas,  
 baþian brimfuglas brædan fethra,  
 hrēosan hrim and snāw hægle gemenged.  
 þonne bæoð þy hefigran heortan benne,  
 sære æfter swæsne, eorg bið geniwad,  
 þonne mæga gemynd mōd geondhweorfeð,  
 greteð gliwstafum georne geondscēawað.  
 Secga geseldan swimmað eft on weg,  
 fīotendra ferð nō þær fela bringeð  
 supra ewidegiedda : cearo bið geniwad  
 þām þe sendan sceal swiþe geneahbe  
 ofer waþema gebind wērigne sefan.

Write phonological or etymological notes on the words in italics. Comment on "the typical elegiac motif" as expressed in the above extract.

## (GROUP B)

## SIXTH PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner.*—MR. P. E. DASTOOR, M.A.

1. Render into modern English *any four* of the following passages, 20  
adding grammatical and etymological notes where necessary :

(a) Serewe if þu havest.

and þe erewe hit wot :

by-fore he þe menep :

by-hynde he þe teleþ.

þv hit myht segge swyhc mon.

þat þe ful wel on.

wyþ-vte echere ore.

he on þe Muchele more.

(b) Hwan Grim him hauede faste bounden,

And sithen in an eld cloth wounden,

A keuel of clutes ful unwraste,

That he ne mouste speke ne fnaste,

Hwere he wolde him bere or lede;

Hwan he hauede don that dede,

Than the swike him gan bede,

That he shulde him forth lede,

And him drinchen in the se,

That forwarde makeden he.

(c) Of þis mastere serueð þeo uniselie ontful e iðe deofles  
kurt, to bringen o lehtre bore cntful eouerd. Uor 3if ei seið wel oðer deð  
wel, nonesweis ne muwen heo lcken þiderward mid rihte eie of gode heorte.  
auh winckeð oðere half, & biholdeð o lust & asquint : & 3if þer is out to  
eadwiten, oðer loken ledlich, þiderward heo schuleð mid elðer eien; &  
hwon heo ibereð þat god heo sleateð adun boe two bore earen : auh þet  
lust a3ean þet vuel is euer wid open.

(d) Thai changit contenances and late,

And held nocht in the first stat;

For thai var fayis to the kyng,

And thouht to cum in-to scowkyng,

And duell with hym quhill that thai saw

Thar tym, and bryng hym than of daw.

Thai grautit till his spek for-thi;

Bot the kyng, that wes vitty.

Persauit weill be thair hawying

That thai lust hym in na thing.

(e) He 'er a bordun I-bounde 'wið a brod lyste,

In A weþe-bondes wyse 'I-wripen aboute.

A Bagge and a Bolle 'he bar bi his syde;

An hundred of ampelles 'on his hat seeten.



Signes of Synay ' and Schelles of Galyé;  
 Moui Cros on his cloke ' and keiðes of Rome,  
 And þe vernicle bi-fore ' for men schulde him knowe.  
 And seo be his signes ' whom he souht hedde.

- (f) Þu gest al to mid swikelede;  
 Alle þine wordes þu bi-leist,  
 Þat hit þincþ soþ al pat þu seist;  
 Alle þine wordes beoþ i-aliked,  
 And so bi-semed and bi-liked,  
 Þat alle þeo þat hi avoþ,  
 Hi weneþ þat þu segge soth.  
 Abid! Abid! me schel þe ðene,  
 Wu hit shal wurpe wel i-sene,  
 Þat þu havest muchel i-loðe  
 Woue þi lesing boþ unwroðe.
- (g) Ho wex to a werwolf ' wiðtly þer-after,  
 al þe making of man ' so mysse hadde ðhe schaped,  
 ac his wit welt he after ' as wel as to-fore,  
 but lelly oþer likeness ' þat longeþ to man-kynne,  
 but a wilde werwolf ' ne walt he neuer after.  
 & whanne þis witty werwolf ' wiste him so schaped.  
 he knew it was bi þe craft ' of his kursed step-moder,  
 & þouðt or he went a-way ' he wold, ðif he mi t,  
 wayte hire sum wicked torn ' what bi-tidde after.

2.

Either,

10.

Consider the statement that *The Owl and the Nightingale* is, from many points of view, the best original long poem of a wholly imaginative character written in English before the time of Chaucer.

Or,

Write brief notes on the characteristics and literary worth of any two of the following works: (a) *Havelock the Dane*; (b) *Mandeville's Travels*; (c) *Barbour's Bruce*; (d) *Confessio Amantis*.

Or,

' *Piers Plowman* is, after the *Canterbury Tales*, the greatest piece of Middle English literature.' Discuss.

8. Render into Modern English one of the following passages Determine the dialect of the passage you select:— 20.

- (a) Ut of latin ðis song is dragen  
 en engleis speche, en soðe sagen;  
 Cristene men ogen ben so fagen,  
 so fueles arn quan he it sen dagen,  
 ðan man hem telled sooe tale  
 wið londres speche and wordes smale,  
 Of blisses dune, of sorwes dale:  
 Quhu lucifer, ðat deuel dwale.  
 Brogt mankinde in sinne and bale,  
 And held hem sperd in helles male,  
 til god arid him in manliched.  
 dede mankinde hote and red,  
 And unspered al ðe fendes sped,  
 And half ðor he sag mikel ned.

- (b) Þe narwe way is godes heste . þat forþ fareþ wel  
fawe.  
þat beoþ þeo . þe heom sche [1] deþ wel . wiþ vych  
vnþewe.  
þeos goþ vnneþe ayein þe cleo . ayein þe heye  
hulle.  
þeos leteþ aweī al heore wil . for godes hastes to  
fulle.  
Go we alle þene wei . for he vs wile brynge.  
Mid þe fewe feyre men . by-uoren heouene kinge.  
þer is alre murehþe næst . myd englene songe.  
Wel eðy wurp þilke mon . þat þer byþ vnderuonge.  
þe leaþ haueþ murehþe . he haueþ so muche . ne  
bit he namore.  
Hwoso þeo blisse for þisse foryet . hit may him rewe  
sore.

## SECOND HALF

Examiner—MR. SUHASCHANDRA RAY, M.A.

1.

Either,

15

- (a) And in his gere, for all the world he ferde  
Nat ouly lyk the loveles maladye  
Of Hereos, but rather lyk manye  
Engendred of humour malencolyk,  
Biforen. in his celle fantasyk.  
And shortly, turned was al up-so-down  
Bothe habit and eek disposicioun  
Of him, this woful loveur daun Arcite.

Explain the above fully. Show how far the ideals of mediæval chivalry are illustrated through the character of Arcite.

Or,

- (b) Ne jompre eek no discordaunt thing y-fere,  
As thus, to usen termes of phisyk;  
In loves termes, hold of thy matere  
The forme alwey and do that it be lyk;  
For if a peyntour wolde peynte a pyk  
With asses f-et, and hede it as an ape  
It cordeth nought; so nere it but a jape.

Translate the above into Modern English and scan the first four lines. Write a short note on the wisdom of Pandarus and show how far he is an original creation of Chaucer.

2.

Either,

15

- (a) He knew the tavernes wel in every toun,  
And everich hostiler and tappestere  
Bet than a lazor or a beggestere;  
For unto swich a worthy man as he  
Acorde nat, as by his facultee,  
To have with seke lazars aqueyntaunce.  
It is nat honest, it may nat avaunce  
For to delen with no swich poraille,  
But al with riche and sellers of vitaille.

Translate the above into Modern English, adding etymological notes on the words italicised. Bring out the irony in the above description

and contrast Chaucer's attitude to the abuses of the church with that of Langland.

Or,

- (b) Let not Sir Surfet sitted al þi Bord;  
Loue him not, for he is a lechour & likerous of Tonge.

And aftur many Metes his Mawe is a-longet.  
And 3if þou diſete þe þus I dar legge boþe myn Eres.  
þat Fiſyk ſchal his Forred hod for his fooðe ſulle,  
And eke his cloke of Calabre with knappes of Gold,  
And heo Fayn, be my Feith his Fiſyk to lete,  
And leorn to labre wip logd leste lyflode Faile.

Translate the above into Modern English.

'Langland represents an honest Plowman as the one best fitted to lead his contemporaries to the shrine of Truth. Chaucer, in his picture of the same English world, places first and foremost a noble knight.' What does the above statement suggest about the difference in temper and ideals between Chaucer and Langland?

8. Translate into Modern English *any two* of the following passages, adding grammatical notes on the words *italicised* :—

20

- (a) Go, litel book, go litel myn tragedie  
Ther god thy maker yrt, er that he *dye*,  
So sende might to make in som comedie !  
But litel book, no making thou n'envye,  
But subgit be to *alle* poesye ;  
And kis the steppes, wher-as thou srest pace  
Virgile, Ovide, Omer, Lucan and Stace.
- (b) O hateful harm ! condicion of poverté !  
With thurst, with cold, with hunger so confounded !  
To asken help thee *shameth* in thy herte ;  
If thou noon a-ke, with nede artow so wounded,  
That verray nede unwrappeth al thy wounde hid !  
Maugre thy heed, thou *most* for indigence  
Or stele, or begge, or borwe thy despence !
- (c) For O thing, sires, saunfly dar I seye,  
That frendes everich other moot obeye,  
If they wol *longe* holden companye.  
Love wol nat ben constreyned by maistrye ;  
Whan maistrve comth, the god of love anon  
Beteth *hise* winges, and farewell ! be is gon !  
Love is a thing as any spirit free ;  
Wommen of kinde desiren liberte,  
And nat to ben constreyned as a thral ;  
And so don men, if I soth seyen shal.

(GROUP B)

### SEVENTH PAPER

*The questions are of equal value.*

#### FIRST HALF

Examiner—MR. MAHMOOD HASSAN, M.A. (OXON.)

*Answer ANY THREE questions.*

1. Explain and illustrate *either* the Breaking of Vowels in Old English, or, Vowel Contraction and the Lengthening of Short Vowels in O. E.

2. Write a note on *Ablaut* in Old English and illustrate your answer with examples.

3. Give the chief Old English Prefixes and Suffixes by means of which Compound verbs are formed from simple verbs, nouns, and adjectives.

4. How are Weak verbs classified in Old English? Give the full conjugations of *nerian* and *fremman*.

5. Classify Old English Adjectives according to declension, gender, and case, and decline any O. E. monosyllabic adjective with a long stem (as *blāc*, *dēop*, *gōd*, etc.).

## SECOND HALF

*Examiner*—MR. NALINIMOHAN CHATTERJEE, M.A.

*Attempt THREE questions only.*

1. What do you understand by literary mannerisms? Write a short essay on standard literary dialect.

2. Write notes on the following words, referring to tendencies of speech which they illustrate :—

School, home, world, citizen, olive, condition, place, fond, play, standard.

3. Discuss the principle of accentuation in English.

4. Give a short history of the Personal Pronoun in English. Write notes on : some, that, more, better, both, them.

5. The practical study of language differs very considerably from the historical study, in point of view and in method. Explain the statement.

## EIGHTH PAPER

*Examiners*—{ MR. K. C. MUKHERJEE, M.A.  
DR. SUNITI KUMAR CHATTERJI, M.A., D.LIT.

*The figures in the margin indicate full marks.*

Write an essay on one of the following subjects :—

100

(1) Mysticism in English Poetry.

(2) The modern tendency towards specialisation: its effect on character and culture.

(3) Poetry divorced from Morality is Poetry divorced from Life.

(4) Epic and Romance.

(5) The civilisation of a people as reflected in the history of its language.

(6) 'As long as our civilisation is essentially one of property, of fences, of exclusiveness, it will be mocked by delusions. Only that good profits which we can taste with all doors open, and which serves all men.'

## SANSKRIT

## FIRST PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

Full marks—50

Examiner—M.M. PANDIT SITARAM SASTRI

प्रथमं प्रश्नं सप्तश्लोकांश्चिष्टानां मध्ये किलपि त्रितयं व्याख्यातव्यम् ।

1 छन्दो हि राज्ञा वक्ष्यन्वकार

17

सूर्याय पन्थामन्वेतवा उ ॥

अपदे पादा प्रतिघातवे कश्च

तापवक्ता छन्दसाविधश्चित् ॥१॥

विश्विन्नो अथा भवतं न वेदसा

विभुर्वा यान उत रातिरश्मिना ॥

युवोर्हि यन्म हिम्येव वाससो-

ऽभ्यायंसेन्वा भवतं मनीषिभिः ॥२॥

विजनाब्ध्यावाः शितिपादो अख्य-

कथं हिरण्यप्रसङ्गं बहन्तः ॥

अश्वविभः सविमुर्देभ्यस्योपस्थे

विश्वान् भुवनानि तस्युः ॥३॥

वज्रहस्ता रुक्मिणी येत्याना-

दारैर्गुह्यसा सदनाम्बसाः ॥

सुमानवन्मू अचते अग्नी

द्यावा वक्ष्यन्व वरत आत्मिनाम् ॥४॥

दु॒रीक॑शी॒षिः प्रा॒तुनं॑ नि॒त्यो

जा॒येव॑ यो॒नाव॑ वि॒न्यजे॑ ॥

चि॒त्रो यद॑धा॒ट्येतो॑ न वि॒द्यु

र॒क्षो न॑ स॒क्ती त्वे॒षः स॒जन्तु॑ ॥५॥

अ॒यो॒धेव॑ दुर्म॒दं चा॒जि॒जु ह॑

म॒हा॒वीरं॑ तु वि॒वाध॑स॒जीव॑न् ॥

माता॑री॒दस्य॑ स॒न्धति॑ व॒धाना॑

सं॒स॒जानाः॑ पि॒पिष॑ इ॒न्द्र॒धनः॑ ॥६॥

अविष्कन्दो देवतनिहोऽपूर्वकं यथाभाष्यं किमपि अक्षत्तुष्टयं व्याख्यायताम् ।  
अन्द्रशमन्दे च खरमेदेन सभयवर्षे विनिदं सङ्गिष्यताम् ।

2. जु॒गु॒रवो॑ ना॒वस्यो॑त व॒न्निं प्रा॒-

11

मु॒च्यत॑ द्रा॒पि॒मि॒ष अ॒प्रा॒प्तान् ॥

प्रा॒ति॒रतं॑ ज॒हि त॒स्यायु॑र॒स्या-

दि॒त्य॒ति॒म॒ल॒क॒रतं॑ क॒नी॒नाम् ॥१॥

अ॒धि॒पे॒मा॒सि व॒पते॑ वृ॒त॒रि॒वा-

पो॒रुं॒ते न॒च स॒न्धे॒व य॒ज्ञे॒ष्टम् ॥

अ॒यो॒धे॒व स॒न्धे॒व सु॒व॒णा॒य क॒स्य॒तो

मा॒वो व॑ ज॒ज्ञं आ॑र॒क्ष्य आ॒व॒र॒तः ॥२॥

वे वि॒द्ये॒ चर॑तः स॒न्धे॒ अ॒न्ना॒न्वा

व॒क्ष॒सु॒प॒था॒प॒येति॑ ॥

इ॒रि॒र॒न्व॒सा भ॑वति स॒न्धा वा॒न्ध॒त्री

अ॒न्व॒सा इ॒ह॒मे॒ सु॒व॒र्णाः ॥३॥

यथाभावं किमपि शृङ्खलं व्याख्येयम् । आद्ये मन्त्रे भाष्योक्तेतिहासविलिखनं कार्यम् । द्वितीये न-शब्दस्य सप्रमाणमर्थं विलिख्य “अ१वा” इत्यत्र स्वरसन्धिः सप्रमाणं प्रदर्शयः । तृतीये “उपधापयति” इत्यत्रात्मनेपदार्थं विलिख्य तदुपपत्तिर्भाष्योक्ता विलिख्यताम् ।

3. इदं विष्णुर्विचक्रमेनेषा निदधे पदम् । 11

समुद्रमस्य पांसुरे ॥१॥

अत्र विष्णुस्त्रिविक्रमविषये यास्कीयो विशेषो भाष्योक्तः समतविभेदः प्रदर्शयताम् । कानि चान्न पदानि संमतानि विष्णुस्य कोऽवाभिप्रेतः कुतश्चेति विलिख्यताम् ।

4. गवामयने चारमण्यौ चतुर्विंशेऽहनि प्रातःसवने मैत्रावरुणस्य स्तोत्रियः ॥ 11  
लैङ्गिको विनियोगः ॥

सविशेषं भाष्यीयं पङ्क्तिद्वय व्याख्येयम् ।

5. प्रयोभिः । अंसम् । कारोत्तरात् । अमम् । वज्रम् । श्वैवम् । एषां 11  
शब्दानामर्थाविवलिख्य हुवे, चनस्यतम्, उग्रन्ति; वनतम्, वाजिनीवस्, साधना,  
घृताचीम्, अपसम्, वाद्यतः । इमे शब्दाः संसाध्यन्तामर्थावेषां विलिख्यन्ताम् ।

6. इच्छन्तस्य यच्छिरः पर्वतेष्वपश्यितम् । तदिदच्छयैषावति । अत्र शयैषा- 11  
वत्पदार्थः कः ? मन्त्रस्यास्य देवतामर्थश्च विलिख्य अचल्यः कथाभागो भाष्यकदुपदर्शितो  
विलिख्यताम् । तेन वैदिके देवतातत्त्वे कौटुम्बिकानुगुणं संपद्यते तत्प्रदर्शयताम् ।

## SECOND HALF

Full marks—50

Examiner—M.M. PANDIT SITARAM SASTRI

प्रथम-प्रश्नसुत्तीत्यं अब्रजिष्टानां किमपि द्वयमुत्तरणीयम् ।

1. अर्थवादमधिकृत्य संस्कृतभाषानयः प्रबन्ध एको विरच्यताम् । 20
2. कति तावद् वेदाः ? का च तेषामानुपूर्वी ? आद्यवर्णस्य वेदेषु परिगणनं 15  
समीचीनं वा न वा ? सयुक्तिकमुत्तरं लिखनीयम् ।
3. शिवाव्याकरणविरक्तानां विषयविभागः कौटुम्बिकः ? 15
4. सवितरं प्रसङ्गसङ्गतिप्रदर्शनपुरःसरं व्याख्यायतां (क - (ख)योरन्यतरो 15

आनः—

(क) आख्यायस्य क्रियाधेयादागर्थक्यमतदर्शानां तत्त्वादनित्यमुच्यते ।

(ख) सक्तुवत् करणपरिणामः ।

## SECOND PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner*—DR. PRABHATCHANDRA CHAKRABARTI, M.A.; PH.D.

*Answer the FIRST question and ANY TWO of the rest.*

1. (a) How do you account for Pāṇini's remarkable innovation in the arrangement of letters ( वचसुसमाज्ञायः ) ? Why the letter च occurs twice in the *Siva-sūtras* ? Explain the utility of these *sūtras* from the grammatical point of view. 20

(b) Explain the rule 'स्थानिवदादेशोऽनलिधौ' commenting on the special significance of स्थानी and आदेशः. Name the different forms into which the compound 'अल्विधिः' may be broken up. Which one is preferable to you ? Give reasons for your answer.

2. (a) Explain any two of the following with reference to the rules :— 15

अजादिभिः स्त्रीलक्ष्य विशेषणान्नेह । पञ्चाङ्गी ।  
अद्रवं मूर्त्तिमत् स्वाङ्गं प्राणिस्थानविकारजम् ।  
उपयोगे किम् ?—नटस्य गार्था ग्रथोति ।  
अतएव आपकाङ्गाधिकरणपदो बहुव्रीहिः ।

(b) Elucidate the following :—

वैकल्पिकः समाहारद्वन्द्वः 'चाये' द्वन्द्वः' इति सूत्रेण प्राप्तः स विरुद्धार्थानां यदि भवति, तर्हि अद्रव्यवाचिनामिवेति नियमार्थमिदम् । तेन द्रव्यवाचिनामितरितरयोग एव ।

3. (a) The same idea of separation ( पृथक्करणम् ) is involved in both 15  
'यथा श्रेष्ठो ब्राह्मणः' and 'माधुराः पाटलीपुत्रकेभ्य आद्यतराः', though we have यष्टी in one case and पञ्चमी in the other. What, then, makes the difference between the two rules 'यतश्च निर्धारणम्' and 'पञ्चमी विभक्तौ' ?

(b) Explain the *paribhāṣā*—'यद्योत्तरं सुनीनां प्रामाण्यम्' ।

4. Comment on the following :— 15

(a) विरुपाक्षानपि समानार्थानाम्

(b) संज्ञापूर्वको विधिरनित्यः ।

(c) कर्मादीनामपि सम्बन्धमात्रविवक्षायां यष्टेऽव ।

5. (a) Give the meaning as well as *prakṛti* and *pratyaya* of any five of the following :— 15

कुशादीया ( बुद्धिः ) । विद्वत्कल्पः । तारकितम् ( जम् ) । एतावान् ।  
प्राठवेष्टः । जनता । ऐन्द्रम् ( हविः ) । वैमतेयः ।

(b) Explain any two of the following *sūtras*—

न कुमताङ्गस्य । वा नपुंसकस्य । अनिकर्तुः प्रकृतिः । हवि च ।



## SECOND HALF

Examiner—PANDIT SAKALNARAYAN SARMA.

1. एकाच उपदेशेऽनुदात्तात् । इभक्त्यो ईर्षिः । इदं दरिद्रस्य । परिश्रमेभ्यः 10  
क्रियः । कर्मवत् कर्मणा तुल्यक्रियः । ऋतौ भारद्वाजस्य ।  
अत्र कैषाश्चिदनुशासं' सुभाषां सोदाहरणा अर्थां लेख्याः ।
2. परस्मैपदविधायकानि कार्गिचिद्वत्कारि सुभाषि सोदाहरणानि प्रकटी- 10  
करणीयानि ।
3. संज्ञायाः कार्यकालत्वादङ्गं यत्र द्धिरुच्यते । 10  
तद्वैव दोषः सम्बन्ध नानेकात्म्यमिति माधवः ।  
व्याख्यायतामिर्यं कारिका ।
4. अचौकमतः । अहिः । एधिः । दीव्यति । चिकीर्षति । भूयति । 10  
नेपि । अदात् । अत्र कैषलं यथायां प्रयोगाणां साधुत्वं विधेयम् ।
5. (a) सार्वधातुके किं चिकीर्षात् । 10  
(b) छिन्नोक्तौ शक्यते छिन्नद्वन्द्वव्यकारेऽप्यनन्वविधाविति प्रतिविधः ।  
अत्र काचिदेका फलित्वा व्याख्येया ।

## THIRD PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

Examiner—DR. I. J. S. TARAPOREWALLA, B.A., PH.D.

[Full marks—66]

*Answer the FIRST question and ANY THREE of the remainder.*

1. Discuss the relations of Sanskrit with the Modern Aryan Vernac- 21  
ulars of India.
2. What do you know of the following? 15  
The Prāṭisākhya, Bopadeva, Siddhantakaumudi.
3. Write a note on the accent system in Sanskrit and point out the 15  
importance of the accent in the development of nominal and verbal forms  
in Sanskrit.
4. Write a note on the use of the locative case in Sanskrit. 15
5. Discuss any three of the following :— 15  
एकशेषः । इति, सौट्, आचोडित, प्रगृह्य ।
6. Discuss any peculiarities in the following :— 15  
(a) ज्योतिषां मन्त्रचारी विदुरपि पाङ्कजा यजते ।  
(b) ज्ञानं ना क्व नमः पादौ ।

- (c) तं पातयां प्रथममासं पपात पचात् ।  
 (d) अयनेकपदे तथा विधोगं उपनतः ।  
 (e) मा जीवन् यः परावशादुःखदग्धोऽपि जीवति ।

## SECOND HALF

Examiner—M. M. GURUCHARAN TARKA-DARSANA-TIRTHA.

[Full marks—34.]

त्रिषु वयोवृत्तं कार्यम् ।

1. कः शब्दबोधः ? तव कानि साक्षात् कारकानि ? तस्य प्रत्यक्षविधया 17  
 प्रामाण्यं येषां सम्मतं तन्मतस्य खल्वने जगदीशसम्मतता का युक्तिः ?
2. जगदोशोक्तं समासलक्षणं कौटिल्यम् ? तव व्यादोषादिपदेन किं यहचीयम् ? 17  
 नित्यानित्यसमासयोः को विशेषः ?
3. व्याख्यातस्य संख्यावाचकत्वे का युक्तिः ? व्याकरणस्य शक्तिवाचकत्वे कौटिल्य- 17  
 सुदाहरणम् ?

## FOURTH PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

Examiner—M. M. DR. BHAGABATKUMAR SASTRI, M.A., PH.D.

[Full marks—50.]

Write an essay on any one of the following subjects :—

50

- (1) Germs of philosophical thought in the Vedas, or, Higher speculations in the Upanishads.
- (2) Poetry of the Rigveda.
- (3) The Mahābhārata and its place in the development of Indian thought.
- (4) The Rāmāyana as an Epic.
- (5) The religious philosophy of the Puranas.
- (6) Materials for the history of Sanskrit literature.
- (7) Sanskrit and ancient Indian culture.
- (8) Fruits of Western scholarship in the field of Sanskrit learning.
- (9) Indian methods and Western methods of interpretation of ancient Sanskrit texts.
- (10) Modern cultural value of Sanskrit language and literature.

## SECOND HALF

*Examiner*—DR. SURENDRANATH DASGUPTA, M.A., PH.D.

[Full marks—50]

Write an essay on *any one* of the following subjects :—

50

(a) Growth and development of Sanskrit poetics.

Or,

Examine intelligently and critically the place that Sanskrit poetry can rightly claim in the poetry of the world or even of Bengal, showing its defects as well as strong points and illustrating your answer with apt quotations.

(b) Social and economic life of India in Vedic times.

Or,

Growth and development of the Dharmasastras.

(c) Religion in the Vedas and Upaniṣads.

Or,

The Mimamsa theories of knowledge of Kumarila and Prabhakara.

(d) Vedantic Idealism and Realism.

Or,

Vedantic and Buddhistic Idealism.

(e) Patanjali—his identity, probable date, and his philosophy..

Or,

Examine critically the extent to which the Sāṃkhya philosophy may be called idealistic or realistic.

(f) Nyaya theory of knowledge.

Or,

The origin, growth, and development of the Nyaya philosophy.

(g) Compare the Nyāya and the Mīmāṃsā theories of knowledge.

Or,

Examine the extent to which Śaṅkara's criticisms against the Sāṃkhya and Buddhism are valid.

(h) Explain clearly the special features of Prakrit poetry.

Or,

Trace the growth and development of the Prakrit literature.

(i) Examine carefully the significance of the discoveries and finds at Harappa and Mahenjodaro.

Or,

Discuss the linguistic characteristics and changes of literary style in the various Prakritic and Sanskritic epigraphical documents through the ages.

—

## (GROUP A)

## FIFTH PAPER

## FIRST HALF

Examiner—DR. AMARESWAR THAKUR, M.A., PH.D.

[Full marks—50.]

1. Explain fully in Sanskrit, quoting lexicons and important grammatical rules, where necessary :— 25

- (a) संभृतीपकरणेन निर्मला  
कर्तुमिष्टमभिवाञ्छता मया ।  
त्वं समीरय इव प्रतीक्षितः  
कर्मक्षेत्रे बलवान् पुपूषता ॥
- (b) वारिपूर्वमखिलासु सत्क्रिया-  
लब्धयुद्धिषु धनानि बीजवत् ।  
भावि विधति फलं महद्भिन्न-  
क्षेत्रभूमिषु नराधिपोऽवपत् ॥
- (c) प्रतिष्ठः कुतोऽपि समुपेत्य  
नरपतिगणं समाययत् ।  
जामिङ्गरणजनितानुशयः  
समुदाचचार निज एव रुक्मिणः ॥
- (d) अघीतिबोधाचरणप्रचारणै-  
र्देशायतन्त्रः प्रथयन्नुपाधिभिः ।  
चतुर्हंशत्वं कृतवान् कुतः स्वयं  
न वेष्टि विद्यासु चतुर्हंशस्त्रयम् ॥
- (e) ससम्भ्रमोत्पातिपतत्कुलाकुलं  
सरः प्रपद्योत्कतयानुकम्पताम् ।  
तस्मिन्निर्लोलेः पतगयद्भ्रातृपं  
न्यवारयद्धारिदृष्टैः करैरिव ॥

2. Write a clear note in Sanskrit on Māgha's knowledge of *Sāṅkhya* and *Mīmāṃsā*, illustrating it with apt quotations. 8

Or,

Discuss the general scholarship of Māgha.

3. Write notes, grammatical or explanatory, on any four of the underlined expressions :— 8

(a) क्षेत्रार्थफलभोगवर्षितं पुंविशेषमनुनीचरं विदुः ॥

(b) हासकरमचटने नितरां शिरसीव ...

- (c) आह चलयति भुवं मयति च्छमित्तम् ... ..  
 (d) तव धनैराज इति नाम कश्चिदमप्यु पच्यते ।  
 (e) अच्यतामि निरवर्तयत्तदा दानहोमयजनानि भूपतिः ॥  
 (f) अभितर्जयन्निव समस्तशृपगन्धमसावकल्पयत् ।

4. Discuss the *alaṅkāra* in any three of the following verses :—

9

- (a) निवारितास्तेन महीतलेऽखिले  
 निरीतिभावं गमितेऽतिष्ठत्ययः ।  
 न तत्पुनर्गन्धमन्धविग्रहाः  
 प्रतीपभूपालस्यगौहृणां दृशः ॥
- § (b) अयं दरिद्रो भवितेति वैधसौ  
 लिपिं खलाटेऽर्थिजनस्य जायतीम् ।  
 खषा न चक्रेऽल्पतकल्पपादपः  
 प्रणोय दारिद्र्यदरिद्रतां शृपः ॥
- (c) विलोकयन्तीभिरजस्रभावना  
 बलादभुं नेत्रनिमोलनेष्वप ।  
 अलम्भि मर्त्याभिरमुष्य दर्शने  
 न विघ्नलीखोऽपि निमेषनिर्मितः ॥
- (d) अकारि नेन श्रवणातिथिगुणः  
 चमासुजा भीमशृपाक्षजालयः ।  
 तदुच्चधैर्यव्ययसंहितेपुष्पा  
 क्षरेषु च ध्वात्मब्रह्मसनाश्रयः ॥
- (e) रसालसालः समदृश्यतामुना  
 कुरद्विरेफारवरोवहुङ्कृतिः ।  
 समीरलोलेसु कुलैर्वियोगिनि  
 जनाय दिव्यस्त्रिव तज्जनाभियम् ॥

## SECOND HALF

Examiner—M. M. DR. BHAGABATKUMAR SASTRI, M.A., PH.D.

[Full marks—50]

1.

Either,

8

Explain fully any eight of the following :—

मौलम्, सायकम्, सारम्, असारम्, मिचितम्, अमिचितम्, मुष्मीभूतम्,  
 अगुलकम्, दद्यादादि, स्रग्दद्याजम्, स्रवाहि and दत्तवाहनम्, as applied to an army.

Or,

Explain the six political principles and the proper occasions for their use according to Sukra.

2.

*Either,*

8

Clearly explain the विजिगीषुमन्त्र according to Kāmandaka.

*Or.*Explain and illustrate *any four* of the following :—

विष्टायाणम्, सन्वाययानम्, सन्धूययानम्, प्रसङ्गयानम् and उपेक्षयानम् ।

3. Answer *any three* of the following :—

3 × 3 = 9

(a) “षडेतां पुरुषो जज्ञाद् भिक्षां नावमिवाथैवे”—what six ?

(b) “नित्योदयुक्तो वै राजा भवितव्यं युधिष्ठिर ।

भगवानुयना चाह श्लोकमव विशांपते”—what śloka ?

(c) नियतस्त्वं नरव्याघ्र एषु सर्वमश्वतः ।

यथा राज्यं समुत्पन्नमादौ क्षतयुगेऽभवत् ॥—how ?

(d) Whose was the original work on दण्डीनीति and how was it successively abridged ?

(e) What are the guiding principles of राष्ट्रगुप्ति and राष्ट्रसंरक्ष ?

(f) एवं विचिनुयाद्राजा परचारं विचक्षणः—how ?

(g) “राजा काण्डस्य कारणम्”—in what sense ?

(h) “नहि जालवमन्त्रव्यो मनुष्य इति भूमिपः”—why not ?

4. Translate into Sanskrit :—

25

The king of the gods himself, in the guise of a jackal, approached the Brahmin and addressed him thus :—

Every other being covets human birth; men again covet the Brahminical birth; you are a man, a Brahmin, and a learned one too; you have therefore attained to a rare destiny; why then should you wish to die? It is really a piece of good luck that you have not been born as a jackal, or a worm, or a rat, or a snake, or a frog, or some such creature in the lowest scale of creation. Brahmin, you ought to be quite content with this much that you now occupy the highest rank in the order of beings. Look here, these worms are biting me, but I have no arms with which to get rid of these. Such a life is certainly miserable. Should I therefore die? No, no. Who knows that if I die I shall not come back in a worse form of life?

## (GROUP A)

## SIXTH PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner*—MR. DHIRES CHANDRA ACHARYYA, M.A.

1. Briefly discuss the excellence of *any three* of the following dramas (with appropriate quotations, if possible) and arrange them in order of merit :—

Vikramorvaśī, Mṛcchakaṭīka, Vapīśaṃbhāra, and Mahāvīracarita.

2. Write all you know about the commentators of the dramas mentioned above. 12

Or,

Discuss the characteristic qualities of the Prākṛit of the dramas mentioned above.

3. (i) Explain the following with full reference to the context :— 20

- (a) अनुपमं ज्ञानं यदि यदि च सन्देहविधुरं  
विपर्ययं वा म्यात् परिवर वसिष्ठस्य चरणौ ।  
ध्रुवं ज्ञाने दोषः कथमपरथा दर्व्यवहृति-  
विशुद्धौ चेत् पापं चरसि न सहन्ते नृपतयः ॥
- (b) जगत् सनातनगुरौ वसिष्ठेऽपि निरङ्कुशः ।  
व्यालक्षिप इवास्माभिरुपक्रभ्यैव दय्यसे ॥
- (c) एककार्यनियोगेऽपि नानयोस्तुल्यशीलता ।  
विवाहे च चितायाश्च यथा हुतभुजोद्वेयोः ॥
- (d) अकलितमहिमानं चाश्रितैरात्तचापैः  
समरशिरसि युष्मद्वाग्यदोषाक्षिपन्नम् ।  
परिवदति समचं मित्रमङ्गाधिराजं  
मम खलु कथयास्मिन् को विशेषोऽङ्गिने वा ।

(ii) Name and define the metres of stanzas marked (a) and (d) above.

(iii) Show the syntactical connection of the following line and note its grammatical peculiarity :—

एहि मन्वे राजपुत्र जामदग्नं विजिष्यसे ।

## SECOND HALF

Examiner—MR. DEBENDRANATH RAY, M.A.

[Marks—50.]

1. What literary and epigraphic evidence have you to prove the date of composition of the Karpūramāñjarī ? 8

Or,

What do you know of Rājasēkhara as a man of letters ?

2. (i) Render into and explain in Sanskrit one of the following stanzas :— 7

- (a) जे लङ्गगिरिनिहलाङ्गि खलिदा संमोषखिचोरं  
फारपुङ्गफणावलीकवनणे पता दरिद्रतन्म ।  
ते एहिं मलचाखिला विरहिणीषीसाससंपक्षिषी  
जादा भक्ति सिमुतये वि बहला तादृचपुषा विष ॥
- (b) गाथन गोवचवहुपदपेक्षिषासु  
दोलासु विवममवदोसु चिसचदिहो ।  
जं जादि खलिदतुरङ्गरहो दिषेसी  
ते वेव्य कोलि दिषहा चरदोहदीहा ॥

- (ii) Point out the figures of speech contained in the above stanzas. 5

(iii) Who is the speaker of the stanza (a) ? What part does the person play in the drama ? 5

8. Translate into Sanskrit :— 25

They used their strength to oppress and not to help other nations. Armies marched backwards and forwards amidst blood and corpses, striking terror into the hearts of the people divided into factions. But happily violence cannot last for ever. The tyrants soon came to be hated with a bitter hatred, and the people waited but for a word. And the word came when it was little looked for. Far away in the country there was a young peasant girl, pure and simple, and utterly without learning. As she heard the tales of woe and agony which reached her from every side, her soft woman's breast was melted in pity for the realm. Words of hope rose within her. She fancied that she heard angels' voices bidding her deliver her native land. The rude soldiers believed that she was indeed sent from heaven. They followed her where they would follow no one else, as she mounted her horse astride like a man, with a banner in her hand, burst through the foreign army, and entered the town in triumph.

(GROUP A)

SEVENTH PAPER

FIRST HALF

Examiner—PANDIT HARIHAR BANNERJEE, M.A.

[Full marks—50]

1. What are the different classes of Prose-writing in Sanskrit ? To which class does Vāsavadatta belong ? What are its characteristics ? Illustrate the principal merits and demerits (if any) of the style of Subandhu. 15

Or,

सा रसवत्ता विहता नवका विलसन्ति चरति नो कंकः ।

सुरसीव कोत्तिशेषं गतवति भुवि विक्रमादित्ये ॥

Discuss the historical reference in the above śloka, if there is any, and explain it mentioning the figures of speech used in it. Determine also the date of Subandhu.

2. Explain in Sanskrit either (a) or (b) :— 15

(a) यद्य च परिसरे सुरासुरसुकुटकुसुमरजोरात्रिपरिमलवाङ्मनो पितामह-कमलकुचश्लेष्मद्वधारा-धरातलगतसगरसुतशतसुरनगरसमारोहच-पुष्करसुरेरावतकटकच-कम्पित-तटहरिचन्दनस्यन्दनसुरभितसलिला सखीलसुरसुन्दरीनितम्बविम्बाहितितरलित-तरङ्ग। ज्ञानावतोर्ध्वसप्तविजटाटवीपरिमलपुष्पवेषिरेणुतिलकसुकुटजटाजूटविकटकुसुद-शान्तिजनितसंस्कारतयेव कुटिलावर्ता धात्रीव सार्वभौमकरस्यर्शोपभोगचना भगवती भागीरथी वदति ।

(b) तत्र च कैचित् कलाङ्गुरा इव विजितनगरमखना, अपरे पाखवा इव दिव्यचक्रःकलागुरुपरिमलितः, अन्ये शरद्विषा इव सुदूरप्रवृत्तसुखाभा, इतरे व्याकुलमुद्यता इव खल्लाधिनाः, कैचिद्राधा इव अकुलशायकाः, कैचिदाखेटका इव



क्यानुसारप्रकृत्याः, कैचित्त्रैभिर्मिमतानुसारिच इव तदागतमतप्रसिद्धः, कैचित् खलना इव सांवस्तरफलदर्शिनः, कैचित् सुनेरपरिसरा इव कार्तस्सरमया, कैचित् विकच-कुसुदाकरा इव भास्वहर्षेणनिनीहिताः, कैचित् कौरवसैनिका इव द्रोणाभासृचकाः स्थिता एतन्मुखाः ।

3. Discuss the figures of speech in any three of the following :—

12

(a) विष्णुस्तपस्वगुणानां भवति

खलानामिव अतीव मखिनमम् ।

अन्तरितवज्रिचामपि

सखिस्तुचां मखिमिमाथधिकः ॥

(b) अविदितगुण्यपि सत्कविभक्तिः

कार्येषु वसति मधुचाराम् ।

अनधिगत-परिमलापि हि

इरति इशं मालतीमाला ॥

(c) यत्र च राजनि राजनीतिचतुरे चतुरदधिनेखलाया भुवा नायके प्रासति वसुमतीं पितृकायै उषोत्सर्गः शशिनः कान्वातुलारोहणं योगे शूलश्याघातचिन्ता दानच्छेदः करिकपोलेषु - - - ।

(d) करस्तस्यास्यर्थं वदति शतकोटिप्रणयिताम् ।

स सर्वस्वं दाता त्वमिव सुरेशं विजयते ॥

4. Elucidate the allusion in any four of the following :—

8

(a) पुरुरवा ब्राह्मणधनदृष्ट्या विननाम् ।

(b) नहुषः परकलत्रदोषात् ।

(c) यथातिर्बिहितब्राह्मण्यौपाधिकदृष्टः पपात ।

(d) सुदुघः स्त्रीमय इव ।

(e) भृगः कृकलासतामगमत् ।

(f) कार्तवीर्या र्जनः पञ्चत्वमयासीत् ।

## SECOND HALF

Examiner—MR. MURALIDHAR BANERJEE, M.A.

[Full marks—50]

1. Estimate the worth of the Harṣacarita as a historical work and as a prose romance. What autobiographical and historical material does the work supply ? What are the merits and defects of Bāṇa's style as compared with that of Subandhu ?

10

2. Turn into simple Sanskrit any one of the following extracts, avoiding the use of compounds as far as practicable :—

10

(a) दोषायमानसकलकुलाचलचक्रवाला पत्न्या सार्धं गन्तुकामिव प्रथमचक्रप्रतिज्ञां ।

धन्वन्तरेरिवान्तरे तस्मिन् अरकाः परस्परच्छादनवाचावलीचदो विगुह्यन्तिऽर्चमाः ।

भूधदभारयौतानां विसर्गमिच्छन्त्यप्यनिकटकुटिलाः कैऽपत्याः रदोर्ध्वं विस्तृभूयैकैकः ककुभाम् । भूमेस्तुवररहितदिसृः खं दिक्ष्यन्त्यारव्यानुष्मानघोमनधधून्निमानवद्वज्रम् ।

(b) न स्यामरातिरक्ताचन्दनचर्चाशिशिरोपचारमन्त्रेण श्राम्यति परिभग्नलपन्थ-  
भानदेहस्य देवस्य दुःखदाहन्वरः सुदारुणः । निकारसन्नापशान्त्वापायपरिचये हि  
हिङ्गिनामुत्तमास्त्रादितमिव रिपुबधिराश्रितममन्दरीपायमपायि पवनात्मजेन जामदग्नौ न  
च श्राम्यन्मनुशिशिशिखासंज्वरसुखायमानस्यशंशौतलेषु चम्रियचतजङ्गदेवसायि ।

(c) स च प्रत्ययलुट्टट्ठतट्ठतुर्गिरव वङ्गहलवधिरसमांसकविरपरपारावार-  
पयसि ममज्ज मञ्जिष्ठावधोऽरुणसारथः । सुकुनायमानकमलिनीकोषविकलं चकाण  
चक्षुरीक कलं कमलसरसि । सविधविरहव्याधिविधुरबधूवाध्यमानं वबन्ध बन्धाविव  
विबुधबन्धुकासि भासति साक्षां दिशं चक्रवाकचक्रवालम् ।

3. Give the substance of any one of the following extracts in your own Sanskrit :—

5

(a) प्रविशन्नेव च विपणिवर्त्मनि कुतूहलाकुलबहुलबालकपरिहृतमूर्ध्वयष्टि-  
विष्णुभक्तिते वामहस्तवर्णिनि भीषणमाङ्गधाधिरुद्रेतप्रेतनाथसनाये चित्तवति पटे  
परलोकाव्यतिकरमितरकरकलितेन शरकाष्ठेन कथयन्तं यमपट्टिकं ददर्श ।

(b) अकाष्ठे खल्वयं समुपस्थितो महाप्रलयो व्यध इव वज्रपातः । सामान्योऽपि  
तावच्छोकः, सोच्छ्रासं मरणम्, अनुपदिष्टौषधौ महाव्याधिः, अभिषेकीकरणोऽग्निप्रवेशः,  
अनुपपत्तयैव नरकवासः, निर्व्योतिरङ्गारवर्षम्, अशकलौकरं क्रकचदारणम् अग्र्यो  
वज्रसूचोपातः ।

(c) देवस्य हर्षः तं प्रत्यवादोत्—करणीयमेवेदमभिहितं मान्येन । इतरथा हि  
गृहीतभुवि भोगिनाथोऽपि दायदण्डिष्टरीर्षालोभुं जस्य । उपरि गच्छति इच्छति नियन्त्राय  
यद्गगणोऽपि भूलता चलितम् । अनमत्सु, शैलेष्वपि कचयद्मभिलषति दातुं करः ।  
तेजोदुर्घिदग्धान् अर्ककरान् अपि चामराणि ग्राहयितुमौहते हृदयम् ।

4. Translate into English any two of the following :—

25

(a) ततस्थस्य चास्य कदाचित्कुसुमसमययुगमुपसंहरन्नजन्मत शोभाभिधानः  
संप्लुक्तमङ्गिकाधवलाट्टहासो महाकालः । प्रत्ययनिर्जितस्यासमुपगतवती वसन्तसामन्तस्य  
बालापत्येष्विव पयःपायिषु नवोदानेषु दर्शितच्छेदो सदुरभूत् । अभिनवोदितस्य सर्वस्यां  
पृथिव्यां सकलकुसुमबन्धनमोचनकरीन्मृतपशुष्वसमयः । स्वयन्तुराजस्याभिषेकाद्राशामर-  
कलापा इवागच्छन्त कामिनीनां चिकुरचयाः कुसुमायुधेन । हिमदग्धसकलकमलिनी-  
कोपेनेव हिमालयाभिमुखीं यातामदादंशुमासी ।

(b) अथ ललाटनपे तपति तपने लिखितललाटिकापुष्पकेरलकचोरचोवर-  
संवैतैः खेदीदबिन्दुमुक्ताचवलयवाहिभिर्दिनकरावाधननियमा इव अगृह्यन्त ललना-  
ललाटिन्दुभिः । चन्दनधूसराभिरसूर्यपञ्चशोभिः कुसुदिनोभिरिव दिवसमसुष्यत सुन्दरीभिः ।  
निद्रालसा राजालोकमपि नासङ्गन् हयः, किमुत जरठमातपम् । अशिशिरसमयेन  
चक्रवाकामधुनाभिनन्दिताः सरित इव तनिमानसानोद्यन्त सोऽपुपाः श्रेयैः । अभिनव-  
पटुपाटलामोदसुरभिपारमलं न केवलं जलम्, जनस्य पवनमपि पातुमशूहभिलाषो दिवस-  
करसन्नापात् ।

(c) यत्र प्रेताग्निधूमाक्षुपातजलचालिता इवाचीयन्त कुट्टयः । पथ्यमानचयनेटका-  
दङ्गदग्धानीव नाङ्गदग्धान् दुरितानि । क्षियमानगुप्तादपरगु-पाटित इव व्यदीर्घतापार्थः ।  
मञ्जुशिरधूमजलधरधाराधीत इव ननाञ्च वर्षसंकरः । दीवमानानिकनीसङ्गमङ्गल-  
34—31

मान इवापलायत कलिः । सुरालयशिलाचट्टनटङ्कनिकरानकता इव व्यदीर्यन्त विपद्ः ।  
महादानविधानकलकलाभिद्रुता इव प्राद्वस्तपद्माः । दोष्यमानसमनमानससहस्र-  
सन्तापिता इव व्यनीर्यन्त व्याधयः । इषविवाहप्रह्ननपुष्पचट्टनटङ्कनिकरानकता इव नोपा-  
सर्पद्वयसखयः ।

## (GROUP A)

## EIGHTH PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner*—MR. SATKARI MUKHERJEE, M.A.

*Attempt ANY FOUR questions, of which the LAST is compulsory.*

1. Is the *gaunī* a separate *vṛtti* or included under *lakṣaṇā*? Fully discuss the nature of the syntactical connexion and the resultant verbal knowledge (*śābdabodha*) of the sentence गौबोद्धीकः with special reference to the position adopted by *Mammaṭa*. 15

2. (a) Discuss the theory of *rasa* as propounded by *Bhaṭṭanāyaka* and show its excellences and limitations. Was *Bhaṭṭanāyaka* an opponent of the *Dhvani* theory? 10

(b) उपादानं लक्षणस्यैकता युक्तेव सा विधा । 5

Fully demonstrate the implication of the restrictive particle एव.

3. (a) What is the principle of distinction between *Padadoṣa* and *Vākyadoṣa*? What is the reason of the exclusion of some *padadoṣas* from the category of the *vākyadoṣas*? What is the ground of non-exclusion of *avācaka* from the latter category? 10

(b) Discuss the *doṣas* found in the following stanza :— 5

लघं रागाहताङ्गा सुहृदमिह यदेवासि यष्टारिकण्डे,  
मातङ्गानामपोहोपरि परपुत्रवैर्या च हृष्टा पतन्ती ।  
तत्-सकोऽयं न किञ्चिद् गणयांत विदितं तेऽस्तु तेनास्मि दत्ता,  
भृत्येभ्यः श्रौतियोगाद् मदितुमिव गतेत्यन्नुधि यस्य कौरिः ॥

4. (a) Give a critical evaluation of the definition of the figure परिणाम as given by *Vidyādhara* and show how far it agrees with or differs from the definition of other writers on poetics. 5

(b) Is the *tātparya* as propounded by *Vidyādhara* in the *Ekāvalī* capable of being identified with the *tātparya* of the *Abhihitānvayavāda* as explained by *Mammaṭa*? Give reasons for the position you take up. 5

(c) What is the ground of division of *upamā* into *śrautī* and *ārthī*? Is the line of argument of *Vidyādhara* the same with that of *Mammaṭa*? 5

5. Define and illustrate any two of the following metres with scansion :— 5

(a) *Drutavilambita*; (b) *Puspitāgrā*; (c) *Praharṣiṇī*; (d) *Rathodhatā*; (e) *Sragdharā*.

## SECOND HALF

Examiner—MR. SIBAPRASAD BHATTACHARYYA, M.A.

1. Explain clearly *any three* of the following statements so as to bring out their full import :— 12

- (i) अलङ्कृतमपि शब्दं न काव्यं गुणवर्जितम् ।
- (ii) ध्वनिमता तु गान्धीयम् ।
- (iii) अयुक्तं त्विदमुक्तं रसानामलङ्कारेति ... नायुक्तम् ।
- (iv) प्रायेण सुव्यनुप्रासस्त्वे ध्वनुप्रासनायकः ।
- (v) शब्दवृत्तिकर्मणां विरम्य व्यापारमात्रः ।
- (vi) ननु समूहालङ्कारात्मकपूर्वजनानन्दस्वरूपस्य रसस्य च तादृशनेतररसिनः कथं विरोधः सम्भावनीयः ? ..... सत्यमुक्तम् । अतएवात्र प्रधानेतरेषु रसेषु स्वातन्त्र्य-विश्रामराहित्यात् पूर्वोरसभावनावाच्च विलक्षणतया सञ्चारिरसनाच्चा व्यपदेशः प्राच्यानाम् ।

2. Explain Bhoja's remark :— 7

आलम्बनविभावेभ्यः स्नेह्यः स्नेह्यः समुन्निवन् ।

रसो रत्यादिदृष्टेः भाव इत्यभिधीयते ॥

Does it materially differ from the exposition offered on the subject by later rhetoricians? Briefly indicate the *rasonmesa* theory as propounded by Bhoja.

Or,

How are you to satisfy yourself that शब्दशक्तिसूत्र-वस्तु-ध्वनि, उपमाध्वनि, श्लेष, and समासीक्ति—all differ from one another? Adduce instances to prove your point. 7

3. Bhoja regards श्लेष, व्यतिरेक, and अर्थात्तरन्यास as a *śabdālaṅkāra*, an *orthālaṅkāra*, and an *ubhayālaṅkāra* respectively. Justify his position. 6

Or,

Indicate, after Viśvanatha, the salient characteristics of *any two* of the following *alaṅkāras*: अरण्य, निशय, उल्लेख, and प्रत्यनीक. Are there sufficient grounds for their recognition as independent figures of poetry?

4. Translate into English *either* of the following groups of verses :— 25

## GROUP A.

कृत्वा कृतीः पूर्वकृताः पुरस्तात्  
प्रत्यादरं ताः पुनरीक्षमाचः ।  
तथैव अल्पेदृशं योऽल्पया वा  
स काव्यचोरीऽस्तु स पातकी च ॥  
सर्वशक्यः कविभिः पुरातनैः-  
रवीक्षितं वस्तु किमपि सम्प्रति ।  
ऐदं युगीनस्तु कुशाग्रधीरपि  
प्रवृत्तिं यतन् सङ्घर्षं स विजयः ॥

गुणेषु ये दीपनगोपयाम्ना  
 दीपान् गुणोक्तुमधीयते वा ।  
 श्रोतुं कवीनां वचनं न तेऽङ्गाः  
 सरस्वतीद्रोहिणु कोऽधिकारः ॥  
 अयं कविर्मेघ कविः कामच  
 हेतुप्रयुक्तिः कृतिभिर्विधेया ।  
 श्रोतं मनसाव यतः समर्थं  
 वागर्थयो रूपनिरूपणाय ॥  
 निद्रां विदूरयसि शास्त्ररसं कण्ठसि  
 सर्व्वेन्द्रियार्थमसमर्थविधिं विधत्से ।  
 चेतस्य विधमयसे कविते पश्याचि  
 लोकस्तथापि सुकृतौ त्वदनुग्रहेण ॥

GROUP B.

सान्द्रीभूतैर्ज्ञविविटपिनां पुष्पितानां वितानै-  
 र्ज्ञावितानां दधति मथुरापत्तने दत्तनेत्रः ।  
 सद्यः क्रौडाभवनवलभोमूर्द्धि विद्योतमानो  
 दध्यौ सद्यस्तरलद्वयो गोकुलारण्यमैतौ ॥  
 आसीद्भासैरथ तरलितस्थलनालीकमालः  
 कुर्वन् पूर्णां नयनपयसां चक्रवालैः प्रणालीः ।  
 आरं आरं प्रणयनिविडां बल्लभोकेलिलक्ष्मीं  
 दीर्घोत्कण्ठाग्रटिलद्वयस्तत्र चित्रायितोऽभूत् ॥  
 अन्तः स्थाने अणमय परामृष्य पाराभिलाषी  
 कष्टाशोभेर्भवनशिखरे कुट्टिमान्स्त्रिविष्टः ।  
 सोत्कण्ठोऽभूदभिमतकथां शंसितुं कंसभेदी  
 नेदिष्ठाय प्रणयलहरीबद्धवागुडवाय ॥

(GROUP B)

FIFTH PAPER

*The figures in the margin indicate full marks.*

FIRST HALF

**Examiner—DR. PRABHATCHANDRA CHAKRABARTI, M.A., PH.D.**

*Answer the THIRD question and ANY TWO of the rest.*

1. Explain the following :—

15.

(a) उच्चावचाः पदार्था भवन्तीति गार्ग्यः ।

(b) विषयवत्त्वी हि इतयो भवन्ति ।

(c) यत्त्वाम् ऋषिर्यस्यां देवतायामार्थपत्यमिच्छन् स्मृतिं प्रयुक्तो तद्देवतः स जन्मो भवति ।

2. (a) What are the main principles of derivation enunciated by Yāska? 15

(b) Do you believe that Yāska was aware of the part played by imitation of sound in the formation of words?

3. (a) Give the derivative meanings of the following words according to Yāska :— 20

आचार्यः । समुद्रः । लक्ष्मोः । चर्कः । निषादः । असुरः । यज्ञः । पुराणम् ।

(b) Is there any internal evidence in the Nirukta that the Mahābhārata in any form was known to Yāska?

4. (a) How does Yāska support the eternity of śabda in face of opposition raised by Audumbarāyaṇa? 15

(b) Do you consider some of the etymological interpretations of Yāska more fanciful than real?

5. (a) Name and illustrate the threefold classification of Rk verses. 15

(b) Comment on—अथापीदमन्तरेण मन्त्रेष्वर्थप्रत्ययो न विद्यते ।

## SECOND HALF

Examiner—M. M. PANDIT SITARAM SASTRI.

अधस्तानां प्रश्नानां मध्ये किमपि पञ्चकस्तुत्तरणीयम् :—

1. कृतस्त्वष्ट्रकृप्रातिशाख्यमेककट्टकमनेककट्टकं वेति सूपपत्तिं विचार्याभिमतं निर्णयिताम् । 10

2. जात्योऽभिनिहितस्यैव सैप्रः प्रसिद्ध एव च । 10

एते स्वराः प्रकल्पन्ते यत्राञ्चस्वरितोदथाः ॥१॥

अस्य श्लोकस्य प्रातिशाख्ये प्रक्षिप्तत्वमाशङ्क्य सूपपत्तिं निरस्यताम् ।

3. प्रातिशाख्यस्य वेदाङ्गत्वं भवति न वेति संमीमांस्याताम् । 10

4. परिपद्ये त्वनार्थान्तातेन वैकाचरीकृतात् । 10

परेषां व्यासमाचारं व्याल्लिखी चेत्स्वरी परी ॥१॥

कारिकामिमी सोदाहरणां व्याख्याय 'तन्मपाद्' इत्यत्र तन्मूषदस्य स्वरं निर्णयितस्य नपाञ्चद्वपरत्वे संपद्यमानो विशेषः सप्रमाणं निरूप्यताम् ।

5. स्पर्शोपसम्बन्धोन् स्पर्शरूपसम्बन्धनिम्नायाश्च परिपादयन्ति । अतश्च-दीवाः सीदा- 10  
हरणं संप्रदर्श्याः ।

6. दूषाद्यः, स्वधितोव—इत्यत्र सस्त्वमिङ्गनस्वरूपं प्रदर्श्य, उवस् + वस्त्ववः, 10  
भूमिः + आद्दे, प्रचेतः + राजन्, परि + कृण्वन्ति—अत्र सस्त्वं सम्बन्धो संसाध्य,

अनुप्रदानात् सर्गात् स्थानात्कारणविधमात् ।

जायते वर्षेऽर्थेऽर्थं परिमाणाच्च पञ्चमात् ॥१॥

अस्य सोदाहरणमर्थः प्रदर्श्यताम् ।

7. अक्षपादज्ञानहेतुर्निश्चयैकत्वानेकसन्निपाते कथं निर्णय इति प्रतिपाद्यताम् । 10

8. छन्दसां वर्णनोवदेवतादिषु विलिख्याचरञ्चन्दसां मावाञ्चन्दसां च विशेषं 10

कचिदस्यै संप्रदर्श्य, प्रसारणटीहिटप्रत्ययानां स्वरूपास्तुदाहरणे संप्रदर्श्यताम् ।

## (GROUP B)

## SIXTH PAPER

## FIRST HALF

Examiner—M.M. PANDIT SITARAM SASTRI

[Full marks—75.]

यथेष्टं प्रश्नपञ्चकं व्याख्येयम् ।

1. दीक्षणीयेष्टौ “सप्तदश सामिधेनीरनुब्रूयात्” इति सामिधेनीसामदृश्यस्य 15  
विधानेन तस्या इष्टेरविकृतित्वमाशङ्क्य युक्त्या तन्निरासो विधीयताम् । किं नाम  
विकृतित्वम् ? प्रकृतित्वं च किम् ?

2. प्रायश्चीयातिथ्योः श्रृङ्खलान्तर्विकल्पमाशङ्क्य तन्निरासः प्रदर्श्यताम् । 15

3. देववर्गं वा एतद्यत्नयाजाश्चानयाजाप्रयाजमनुयाजमिष्वं संश्रित्या अप्रतिश्राय 15  
सकृदतिष्ठस्यावयति यज्ञस्याभिक्रान्त्या अनपक्रमाय ।

यथाभार्यं रेखाङ्कितस्थले ऽर्थविशेषविवरणपूर्वमयं संदर्भो व्याख्यायताम् ।

यङोक्थं वा एतत्प्रसङ्गं नव प्रातर्यज्ञा गृह्यन्ते नवभिर्बह्विच्यवमाने स्तवते स्तुते सोमे  
दशनं गृह्णाति चिकार इतरासो दशनः सो सा सन्धा ॥ सप्तसङ्गं सविशेषं सन्दर्भोऽर्थं  
व्याख्यायतां च ।

4. आहुतिभागानां सोमभागानां च देवतानां स्वरूपाणि व्याख्याय सोमपानाम- 15  
सोमपानां च देवतानां संज्ञां विलिख्य तद्भेदा यथाभार्यं निरूप्यन्ताम् ॥ बह्विच्यवमानार्थं  
प्रसर्पणस्य कालं प्रकारं च यथाभार्यं प्रदर्श्य तच्च केषांत्विति प्रसर्पणं भवति ? होतु-  
स्तद्वति न वेति यथाब्राह्मणं भाष्यमनुबध्य निरूप्यतां च ।

5. इविच्यङ्क्यचरपङ्क्तिनरासपङ्क्तिसवनपङ्क्तियज्ञानां स्वरूपाणि कालाच्च 15  
विनियन्ताम् ॥ ज्योतिष्टोमे होतुः शस्त्राणि कति कानि चेति विलिख्याद्यशस्त्रस्य स्वरूपं  
सावान्तरविभागं विलिख्यताम् ।

6. प्रसङ्गशस्त्रे कति का देवता मवन्ति ? तासां च देवतानामप्रितनूपत्वमुच्यते 15  
यथाब्राह्मणं तत्प्रदर्श्यताम् ॥ ज्योतिष्टोमे सवनवयेऽध्वरुहोदोराहावग्न तगरयोः स्वरूपाणि  
यथाभार्यं विलिख्यन्ताम् ।

7. सोमानयनविषयिणीमाख्यायिका विलिख्य प्रजापतेर्दुहितृभिर्भयानरूपाया- 15  
माख्यायिकायां प्रजापत्यादीनां नक्षत्ररूपत्वमुच्यमानं यथा संगच्छते तथा प्रतिपाद्यताम् ।

8. अग्निष्टोमात्पाचोनानां तदुत्तरेषां च यज्ञानामग्निष्टोमेऽनुर्भावकस्यैव तत्प्रसङ्गा 15  
ब्राह्मणोक्ता विलिख्यताम् ।

9. ग्युल्लुङ्गे षादशाङ्गे नवरात्रे द्वितीयस्याङ्गः स्वरूपं देवता हन्द्वादिनां समुदायं 15  
निरूप्यताम् ।

कारव्याः । दिशां त्रुप्तयः । ग्युल्लुङ्गः । निगदः । पारिषितयः । दर्भपिङ्गलाः ।  
दीक्षितविमानतः । संसवः । स्वरः । आगूः । एषामर्था निरूप्यन्तां च ।

10. तस्य नवतिशतं सोमियाः सा या नवतिसौ दश त्रिंशतीऽथ या नवतिसौ दशाय 15  
या दश तासामेका सोमियोदेति चिह्नपरिचिह्नते सोऽसादिकविंशोऽध्याहितस्तपति  
विषुवात्वा एष सोमानी दश वा एतस्मादर्वाचस्त्रिंशतो दश पराचो मध्य एष एकविंश  
उभयतोऽध्याहितस्तपति तस्यासौ सोमियोदेति रैतस्मिन्नध्यच्छेदा स यजमानसहै चरं  
सहो बलम् ॥ सन्दर्भोऽयं यथाभावं व्याख्यायताम् ।

## SECOND HALF

Examiner—PANDIT LAKSHMINARAYAN SHASTRI, M.A.

Translate one poetry extract and one prose extract from among the 25  
following extracts into simple classical Sanskrit, adding notes wherever  
necessary to make the translation intelligible :—

(1) भवाशर्व्वी सृष्टं माभियातं

भूतपती पशुपती नमो वाम् ।

प्रतिहितामायता मा वि स्नाष्ट मा

नो हिंसिष्टं हिपदो मा चतुष्टदः ॥

शुने क्रोष्टे मा शरीराणि कर्मा-

मविक्रवेभ्यो गृध्रेभ्यो ये च कृष्णा अविष्यवः ।

मत्तिकास्ते पशुपते वशांसि ते विघसी मा विदमः ॥

क्रन्दाय ते प्राणाय याच ते भव रोपयः ।

नमस्ते रुद्र कृष्णः सहस्राक्षायामर्थ्य ॥

पुरस्तात् ते नमः कृष्ण उत्तरादधरादुत ।

अभीवर्गादु दिवाम्पर्यन्तरिचाय ते नमः ॥

सुखाय ते पशुपते यानि अशूँष ते भवः ।

त्वचे रूपाय संहृष्टे प्रतीचीनाय ते नमः ॥

अङ्गेभ्यस्त उदराय जिह्वाया आस्याय ते ।

दह्यो गन्धाय ते नमः ॥

(2) देवानां नु वयं जाना प्रबोचाम विपन्वद्या ।

उक्थेषु शस्यमानेषु यः पश्चादुत्तरे युगे ॥

ब्रह्मणस्पतिरेता मं कर्मा र इवाधमत् ।

देवानां पूर्व्ये युगेऽसतः सदजायत ॥

देवानां युगे प्रचमीऽसतः सदजायत ।

तदाशा अन्वजायन्त तदुत्तानपदस्पति ॥

भूजैश्च उत्तानपदो भुव आशा अजायन्त ।

अद्विरेष्ट्यो अजायत दक्षादितिः परि ॥

अद्विरेष्ट्यजनिष्ट दक्ष या दुहिता तव ।

तां देवा अन्वजायन्त भद्रा अस्तवन्ववः ॥

(3) महाइविषा इ वै देवा इवं जज्ञ स्तेनैव व्यजयन् धेयनीषां विजितिरण  
यानिषैषां तस्मिन्संयाम इवष आर्षसानिषैतच्छ्वान् व्यडङ्गन् तास्त्रिरहरन् यत्  
मृग्यकीरजयन्ताय यदेव एतेन वज्रते नाह्वैतस्व कां अनीपुष्पं अतीति देवा अकुर्वन्निद्रि



त्वैष एतत्करोतीति या उ चैवास्त प्रजा जाता यासाजातासा उभयौ रुद्रियात् प्रसृजति ता अस्मानमोवा अकिरिषाः प्रजाः प्रजायन्ते तस्माद्वा एव एतेन यजते । ते वै रौद्रा भवन्ति रुद्रस्य होचुरेककपाला भवन्त्येकदेवत्या अस्मिन्निति ।

यावन्तो गृह्णाद्यावन्तः प्रातपुरुषं भवन्त्येकेनातिरिक्ताः प्रतिपुरुषमेवैतदेकमेकेन या अस्य प्रजा जातासा रुद्रियात् प्रसृजत्येकेनातिरिक्ता भवन्ति या एवास्याजाताः प्रजासा एव तेन रुद्रियात्प्रसृजति ।

(4) देवाश्च ह वा असुराश्चोभये प्राजापत्या अस्पृहेन्त ततो ह देवा अनुयुर्वमिवासुते हामुरा मेनिरे ऽस्माकं वा इदं भुवनमिति । ते होचुर्हन्तेनां पृथिवीं विभजामहा इति तां विभज्योपत्रौवासेति तामौष्ण्यसर्गभिः पश्चात्प्राप्तौ विभजमाना अभीयुक्तादु ह देवाः शुक्लपुर्विभजन्ते ह वा इमां पृथिवीमसुरा इति । ते होचुः प्रेत तदेव्याम इति यमेनां पृथिवीमसुरा विभजन्ते के स्याम यदस्या न भजेमहीति ते ह यज्ञमेव विष्णुं पुरस्कृत्या-जन्तुः । ते होचुरेव नां ऽस्यां पृथिव्यां भजतेत्यप्येव नां ऽस्यां पृथिव्यामस्त्विति ते हामुरा असृयन्त इवोचुर्यावदेवैष विष्णुरभिषेते तावदेव वो दत्त इति । वामनो ह विष्णुरास तद्देवा न जिह्वाङ्गिरे मङ्गहै नां ऽदुर्योध्मी नी यज्ञसम्पत्तमदुरिति त तदेव यज्ञं 'वणु' प्राश्निपाद्य कृन्दाभिरभितः पर्यगृह्णन् ।

### (GROUP B)

#### SEVENTH PAPER

Examiners— { M. M. ANANTAKRISHNA SASTRI.  
Mr. KOKILESWAR BHATTACHARYYA, M.A.

[Marks—100.]

1. Give in your own words the substance of the teachings embodied 20  
in the discourse held between याज्ञवल्क्य and अश्वत्थ, as also between  
याज्ञवल्क्य and कण्वीश ।

In this connection state distinctly how Sankara attempts to reconcile the apparent contradiction contained in the following line :—

“ननु कथमेकस्यैवात्मनः अज्ञनायाद्यतोतत्वं तद्वत्त्वं इति विरुद्धधर्मसमवायित्वमिति ?”

2. Give in detail the nature of the discussion that took place between 20  
नार्गी and याज्ञवल्क्य in the philosophical congress held during the reign  
of Janaka.

3. Describe the principal teachings about the three conditions of the 20  
Finite Self as detailed in the story of प्रजापति and इन्द्र-विरोचन given in the  
Chandogya Upanishad.

4. Explain the following terms :—

15

सम्प्रसादः, छायात्मा, सन्नान्न, अतिमुक्ति, अतिवह ।

Or,

A kind of Pantheistic view is embodied in the lines quoted below.  
How does Sankara refute this view?—

“अत केचिद्वाचयन्ते—आत्मवस्तुनः स्वत एव एकत्वं नानात्वञ्च—यथा गोः  
गोद्वयतया एकत्वम्, साक्षादीनां धर्माणां परस्परतो भेदः ; यथा खूखीषु एकत्वं  
नानात्वञ्च, तथा निरवयवेषु अमूर्तवस्तुषु एकत्वं नानात्वञ्च अनुमीयम्। आत्मनोऽपि  
तद्वदेव दृष्टादानां परस्परं नानात्वम्, आत्मना च एकत्वमिति।”

5. Translate the following into English :—

25

(a) तमेव धीरो विज्ञाय प्रज्ञां कुर्वीत ब्राह्मणः।

नानुध्यायाद् वदन् शब्दान् वाचो विम्लपञ्चं हि तत् ॥

(b) नहि अग्निहोत्रादीन्येव कर्माणि। ब्रह्मचर्यम्, तपः, सत्यवदनम्, श्रमः,  
दमः, अहिंसेत्येवमादीन्यपि कर्माणि इतराश्चमप्रसिद्धानि विद्योत्पत्तौ साधकतमानि  
असङ्कीर्णानि विद्यन्ते ध्यानधारणादिलक्षणाणि च।

(c) स यथेमा नयः स्यन्दमानाः समुद्रं प्राप्यासं गच्छन्ति भिद्येते तासां  
नामरूपे समुद्र इत्येवं प्रीयते। एवमेवास्य परिदृष्टरिमाः षोडशकलाः पुरुषायणाः पुरुषं  
प्राप्यासं गच्छन्ति भिद्येते तासां नामरूपे पुरुष इत्येवं प्रीयते, स एकोऽकलोऽमृतो भवति  
तदेव श्लोकः :—

‘अरा इव रथनाभौ कला यस्मिन् प्रतिष्ठिताः।

तं वेद्यं पुरुषं वेद मा वो मृत्युः परिव्यथा इति ॥’

(GROUP B)

EIGHTH PAPER

FIRST HALF

Examiner—M. M. SITIKANTHA VACHASPATI.

[Full marks—75.]

गोभिलगृह्यसूत्रीयप्रश्नाः।

अथक्षत्रेषु सप्तसु प्रश्नेषु प्रश्नपञ्चकमुत्तरणीयं तच्च च

प्रथमप्रश्नोऽवश्यमन्तर्भावनीयः।

1. “यथादेशश्च” कथमिदं सूत्रमवतारितमाचार्येण? कीदृशं वा व्याख्यानमस्य? 15  
टीकाह्रदुक्तरीत्या व्याख्येयम्।

2. “ब्रह्मचारी वेदमधीत्यान्वां समिधमभ्याधास्यन्” कस्मिन् प्रसङ्गे सूत्रमिद- 15  
मुच्यते? व्याख्यायतामिदम्। नेदमित्यत्र एकवचनं विवक्षितं न वा?  
विवक्षितत्वे न किञ्चित् प्रष्टव्यम्, अविवक्षितत्वे प्रमाद्यं दैयम्। किं समिधश्च  
अभ्याधाने कतिधा कालाः प्रदर्शिता आचार्येण?

3. “यज्ञादेव निवर्तते” सोपपदम् स्वमिदं व्याख्येयम् । एवकारेणाव किं प्रतिपादितम् ? 15

4. “सन्ध्यां पीथमासीमुपवसेत्” कः स्वस्योपपदम् ? का नाम सन्ध्या पीथमासी ? पीथमासीकायः कतिविधः ? उपवासपदस्य कोऽर्थः ? टीका-कहिशा लेख्यम् । 15

5. “अनुमन्त्रिता गुरुः गोत्रेष्वाभिवादयते” गुरुरथ कः ? गोत्रेऽथ कस्य गोत्रे ? पित्रगोत्रे भर्तृगोत्रे वा ? समन्वयसुतरं लेख्यम् । 15

6. “इन्द्रियाण्यङ्गिः संस्पृशेत् ।” 15  
“अचिन्तनी नास्तिकी कर्णाविति”

आचमने एष गृह्योक्तपाठक्रमो यावत्तः उत क्रमान्तरम् ? तद्दीकोक्तदिशा लेख्यम् ।

7. यज्ञोपवीतो, प्राचीनावीतो ; परमेष्ठिकरणम्, औपवसथिकम्, उपसोषा- 15  
भिचारितम्, व्युत्पत्तिं प्रदर्शय शब्दा एते व्याख्येयाः । तच्च यज्ञोपवीतो-प्राचीना-  
वीतिनोः किं लक्षणम् ?

## SECOND HALF

Examiner—MR. HARIHAR BANERJEE, M.A.

[Full marks—25.]

Translate into idiomatic Sanskrit :—

25

Then I was one day caught among some thieves by the police, and taken to the place of impalement, in order to be put to death. At that moment, a great elephant belonging to the king, which had gone mad, and broken its fastening and was killing people in all directions, came to that very place. The executioners, alarmed at the elephant, left me and fled somewhere or other, and I escaped in that confusion and made off. But I heard from people that my father had died on hearing that I was being led off to execution and my mother had followed him. Then I was distracted with sorrow, and as I was wandering about despondent, intent on self-destruction, I happened to reach in course of time this great uninhabited wood. No sooner had I entered it, than a celestial nymph suddenly revealed herself to me and approached me, and consoling me said to me, ‘My son, this retreat, which you have come to, belongs to the royal sage Vinītamati, so your sin is destroyed’.

## (GROUP C)

## FIFTH PAPER

## FIRST HALF

*Examiner—M. M. ANANTAKRISHNA SASTRI*

[Full marks—75.]

1. “अथातो धर्मजिज्ञासा” इति सूत्रं यथाभाष्यं पूर्वोत्तरपक्षविवेचनपूर्वकं व्याख्याय 15  
धर्मलक्षणसूत्रं चोदनापदार्थनिरूपणपूर्वकं अर्थपदसार्थकप्रदर्शनपूर्वकं च विव्रियताम् ।

2. अधोलिखितानि वाक्यानि प्रकरणनिर्देशपूर्वकं व्याख्यायन्ताम् :— 15

(1) शब्दकल्पनायां च सा च शब्दकल्पना च ; (2) असम्बन्धमिदं वचनमुपपन्नम् ; (3) प्राणादिभिरननुपलभामहे ; (4) पृथिवीचयनप्रतिषेधार्थं च यद्वाक्यं चयनप्रतिषेधार्थमेव तत् ।

3. फलकामादिपदैरेव स्तुतिसम्भवात् अर्थवादवाक्यानि किमर्थानि ? निरर्थवाद- 15  
विधिस्थली निर्विधिकार्थवादस्थली च कथं स्तुतिविध्योर्निर्वाहः ? कुचार्थवादस्य फल-  
समर्पकत्वम् कुत्र च न ? सर्वं विविच्यताम् ।

4. स्मृतिप्रामाण्ये आचारप्रामाण्ये वा कथं ‘चोदनालक्षणेऽर्थो धर्मः’ इति लक्षण- 15  
निर्वाहः ? यववराहधिकरणस्य, साधुशब्दाधिकरणस्य, आह्वयधिकरणस्य च कथं धर्मविचारे उपयोगः ? सर्वं निष्पन्न्यताम् ।

5. अधोलिखितानामधिकरणानां पञ्चावयवाः संगृह्य विविच्यन्ताम् :— 15

(1) चिदाधिकरणम् ; (2) प्रकरणान्तराधिकरणम् ; (3) रीत्यधि-  
करणम् ; (4) अपूर्वाधिकरणम् ; (5) पशुसोमाधिकरणम् ।

## SECOND HALF

*Examiner—M. M. ANANTAKRISHNA SASTRI*

[Full marks—25.]

Translate into English the following passages :—

25

(a) यत्तदानीमवोपयति तदाऽऽकालिकम् । तच्च सर्वलोकस्याभिमतम्, न यश्चिरभावि । तस्मात् प्रवर्ग्यकाले दिक्षतीक्षाशकरणं प्राग्वंशस्य प्रशस्यते । तच्च सद्यःफलम्, धूमक्रेतानुभवात् ; इतरत्तु कर्मजन्यं सत् कदाचिद्विच्यति । कलहेद ? शास्त्रगम्यं हि तत् । इदं तु सर्वप्रत्यक्षम् । तदपेक्षया च ज्ञातमानेऽप्यज्ञायमानवचन-  
मितरप्रशंसार्थम् ।

(b) यद्यप्यैन्द्रियकत्वादृष्टकादि-सुतीनां पीरवेद्यानमगम्यत्वं संभवति ; तथापि विप्रलम्भभूषितत्वादश्वत्थवचनेषु पुरुषेष्टनध्यवसानम् । इत्यनेन ज्ञानाग्निकान्धर्मान् आग्निकत्वाध्यायीपेक्ष केषिद्यत्वेऽपि अभिधानाः । तेन मन्त्रादिभिरपि किमष्टकादि-  
सुतीरूपकस्य वेदसूत्रत्वं स्तुतिवचनानां प्रतिज्ञातम्, उतानुपलब्धैव स्तेष्वेवा तत् प्रतिज्ञात-  
मिति भवति सन्देहः । तावता च प्रामाण्यविधातः ।

## (GROUP C)

## SIXTH PAPER

## FIRST HALF

*Examiner*—MR. KSHITISCHANDRA CHATTERJEE, M.A.

यस्य कस्यापि प्रश्नपञ्चकस्योत्तरं लेख्यम् ।

[Full marks—50.]

1. मीमांसकनय आकृतिर्वा शब्दार्थो व्यक्तिर्वा ? युक्त्युपन्यासपरःसरं 10  
सविस्तरं विव्रियताम् । अत्र भाट्टगुरुमतयोः को विशेषः ?
2. किं तावदधिकरणम् ? कति तस्याङ्गानि ? कानां च तानि ? सोदा- 10  
हरणमुत्तरं लेख्यम् ।
3. विचारशास्त्रमारम्भणोयं वा न वेति सयुक्तिकं मतभेदप्रदर्शनपूर्वकं प्रतिपाद्य- 10  
ताम् ।
4. आर्थ्यन्त्रिष्ठाधिकरणं सोपपत्तिकं विव्रियताम् । 10
5. मातुलसुतापरिणयस्य ङीलाकादौनाञ्च प्रामाण्यप्रामाण्यं वा प्रमाणोपन्यास- 10  
पुरःसरं विचार्यताम् ।
6. “क्रीणात्यरुणयेत्येतत् सङ्कीर्णं वा क्रयैकभाक् ?” सर्वस्वं सयुक्तिकं चोत्तरं 10  
लेख्यम् ।

## SECOND HALF

[Full marks—50.]

*Examiner*—M. M. PRAMATHANATH TARKABHUSHAN.

1. वैश्वदेवेन यजितेत्यत्र वैश्वदेवशब्दस्य कर्मनामधेयत्वमुत्पत्तिशिट्गुणबलीयस्ता- 13  
दिति वादिनां मनो मीमांसान्यायप्रकाशोक्तदिशः विचार्य व्यवस्थाप्यताम् ।

अथवा

नियमपरिसङ्कायोर्लक्षणेदाहरणोपन्यासपुरस्सरं मिथो वैलक्षण्यं मीमांसान्याय-  
प्रकाशोक्तदिशः प्रतिपाद्यताम् ।

2. अर्थवादप्रामाण्याधिकरणं जैमिनोय-न्यायमाला-विस्तरमनुसृत्य सम्यगारण्य- 12  
ताम् ।

अथवा

प्रत्यक्षकुतिविरोधितया अप्रतीयमानाया अपि कृतेः सुत्यननुमापकत्वाधिकरणं  
माधवाचार्यदर्शितदिशः प्रतिपाद्यताम् ।

3. Translate any one of the following extracts :—

25

(1) “ननु नेष्टसाधनता लिङ्गादिप्रत्ययार्थः, किन्तु नियोगी मानाकारागम्यः ।  
स च धात्वर्थेषु नियोग्यं निगुह्यमानः सामर्थ्यादधात्वर्थेऽस्य फलसाधनत्वं कल्पयति इति ।  
नेतत् सारम् । अनुपपत्त्यभावात् । किं धात्वर्थस्य फलसाधनत्वमकरेण नियोगस्य  
स्वरूपमनुपपन्नम्, उत प्रवर्तकत्वम् अनुपपन्नम् ? नायः । असत्यपि फले निव-  
नेतिचकनियोगस्वरूपस्य सत्त्वम् । द्वितीयेऽपि नियोगः किं फलकामनामपेक्ष्य उत

स्वयमेव प्रवर्तकः ? आद्ये फलकामनैव प्रवर्तयतु किं नियोगेन ? प्रत्यक्षादिषु फलकामनायाः प्रवर्तने स्वातन्त्र्यदर्शनात् । द्वितीये नदीवेगादिबन्नियोगः फलकामनारहितमपि पुरुषं बलात् प्रवर्तयेत् । तथाच तत् प्रवर्तकत्वं धात्वर्थस्य फलसाधनत्वाभावेऽप्युपपन्नम् । अन्यथा नदीवेगोऽपि फलसाधने प्रवर्तयेत् । नियोगमात्रस्य धात्वर्थफलसंबन्धाकल्पात्वेऽपि फलकामिना प्रतीयमाणो नियोगकल्पात् इति चेन्न । अत्रापि तयोः संबन्धमन्तरेणानुपपत्त्यभावात् । न तावत् कास्यफलस्य धात्वर्थसाध्यत्वमन्तरेणाधिकारिविशेषणत्वमनुपपन्नम् । जीवनादीनामसाध्यानामपि यावज्जीवं जुहुयादित्यादिषु अधिकारिविशेषणत्वदर्शनात् ” ।

(2) “ लभ्यते हि कर्मकारके स्वाध्याये द्विविधं दृष्टफलमध्ययनक्रियाजनितं फलवदर्थान्वबोधैतुभूतप्राप्तिः संस्कारश्च । अर्थान्वबोधार्थाचरयद्द्वयोः साध्यसाधनभावस्य लोकासिद्धत्वेऽपि न विधिवैयर्थ्यं नियमार्थत्वात् । न च संस्कृतस्य विनियोगाभावः । क्रतुवध्युपादानप्रमाणादेव विनियोगसिद्धेः । क्रतुविधिर्हि स्वविषयावबोधमपेक्षमाणस्तस्य जनकतया संस्कृतं स्वाध्यायमुपादत्ते । ननु उपादानप्रमाणं ज्ञानस्य जनकतया स्वाध्यायमात्रमादत्ते न संस्कारमिति चेत् सत्यं तथापि कर्मप्रधानाध्ययनविधिसामर्थ्यादेव संस्कृतस्वाध्यायजन्मविशिष्टज्ञानवत्तेवानुष्ठितो यागोऽपूर्व्वं जनयतीति कल्प्यते । प्रधानवदनङ्गस्याध्ययनस्य क्रतुकारित्वमविरुद्धम्, तत उभयविधिसामर्थ्यादेव विवक्षितार्थो लभ्यते । एव च यथाश्रुत-कर्मकारकगतदृष्टफलसंभवे सक्तुन्वायेनाश्रुत-करणत्व-कल्पनमदृष्टफलकल्पनं चान्याय्यम् । ननु तस्यप्रत्ययेन प्रकृत्यर्थभूताध्ययनोपरक्तमपूर्व्वमभिधीयते न तु कल्प्यत इति चेन्नैवम् । अपूर्व्वमभिधायितव्यप्रत्ययः स्वाध्यायगतत्वेनैवापूर्व्वमभिध्यान्नाध्ययनगतत्वेन । तस्यप्रत्ययः कर्मभूतस्वाध्यायपरत्वात् ” ।

### (GROUP C)

#### SEVENTH PAPER.

#### FIRST HALF.

Examiner—M. M. SITIKANTHA VACHASPATI

[Full marks—50.]

1. अधस्यविषयवयात् यत् किञ्चनैकमादाय कश्चित् प्रश्नो लेख्यः :— 10  
 (क) “ प्राधान्यं हि मनोः श्रुतम् ”  
 (ख) “ दशसंस्काराः ”  
 (ग) “ पञ्चमूलाः ”
2. अधस्य-प्रश्न-चतुष्टयात् प्रश्नवयसुत्तरणीयम् :— 10  
 तैर्वाग्मिदनु समानां पुरुषाणां महीजसाम् ।  
 सुखाभ्यो मूर्तिमात्राभ्यः संभवत्यव्ययाऽयम् ॥  
 कुङ्कुमाक्तदिशा वचनमिदं विशदीकृत्य व्याख्यायताम् ।

8. श्वी देवे पिष्टकार्यं त्रीनेनैकसुभयत वा । 10  
 भोजयेत् सुसखोऽपि न प्रसजेत विसरी ॥  
 चासपिष्टक्रियाकर्म्म विजातेः संस्थितस्य तु ।  
 अदेवं भोजयेच्छास्त्रं पिष्टनेकानु निर्व्यपेत् ॥

वचनद्वयं व्याख्येयम् ।

4. उपकार्मण उत्सर्गस्य कः काणी मनुना दर्शितः ? तदनन्तरं च न ध्याय- 10  
 कासः कौटुम्भः ? कानिचिदनध्यायकारणानि निर्दिश्यन्ताम् ।

5. पुत्राः कतिविधाः ? तेषु के दायादबान्धवाः के वा अदायादबान्धवाः ? तत् 10  
 च द्वित्रिपुत्रस्य किं लक्षणम् ? प्रमायेन समर्थय ।

अधस्त्येषु सूत्रेषु सूत्रद्वयं व्याख्येयम् :—

5 × 2 = 10

- (क) “अनुभाविनाश्च परिवापनम्”  
 (ख) “आप्रीत चेदधिदग्धे”  
 (ग) “परिषष्टं लौकं प्रयतम्”  
 (घ) “नेमं लौकिकमर्थं पुरस्कृत्य धर्माचरेत्”

अधस्त्येषु सूत्रेषु सूत्रद्वयं व्याख्येयम् :—

5 × 2 = 10

- (क) “उत्तरेषां चैतदविरोधि”  
 (ख) “जघन्यमनिवर्तं चरेत्”  
 (ग) “अल्पयोऽपि ह्रीने”

## SECOND HALF

[Full marks—50.]

Examiner—PANDIT BANAMALI VEDANTATIRTHA

1. अपठते कर्मणि वामदेव्यगानम् ।

9

Why has it been suggested that the first word of the *sūtra* should be spelt as “अपठते” ? Is this emendation necessary? What is to be done if the sacrificers are unable to sing? Reproduce those *ṛks* that are to be sung. Is the *Vāmadevyaḡāna* (chanting) compulsory ?

Or,

Explain the terms वञ्चावर्ती, पूर्णपाद, पाकयज्ञ, कर्तुं, स्थगर, लक्ष्म, and quote two *sūtras* containing two of these terms, one each.

2. What are the subjects dealt with in *Gr̥hyasūtras* as distinguished 12  
 from *dharma* and *śrauta sūtras*. Name five *Gr̥hyasūtras* and mention for which class of people was each intended. How many *ṛshis* are mentioned in Gobhila? Name these and quote the opinion of one such *ṛshi*.

Or,

Attempt a short description of the new moon sacrifice after Gobhila.

3. (a) What are the *aṣṭakās* (अष्टका) ? How many are they? 10  
 What is the proper season for each? What particular offerings are recommended for each? Is the अष्टकं to be performed after each *aṣṭakā*? What is the precise time for its performance?

(b) गुरुं गोत्रेणाभिवादेत् ।

What is meant by the term गुरु here? What are the words to be used in the salutation? Is the bride to mention the gotra of her father or of her husband? When does a woman cease to bear her father's gotra?

(c) Briefly explain in Sanskrit or Bengali or English :—

11

(i) तृतीयस्य गर्भमासस्यादिसद्विधे पु० सुवनस्य कालः ।

(ii) यदाथै कुमारं जातमाचक्षीरन् अथ ब्रूयात् काङ्क्षत नाभिजननेन सन-  
प्रतिधानेन चेति ।

(iii) अग्नें संप्रेषयति ब्रह्मचार्यस्यसविति । सनिधमाधिस्यापोऽयानकार्म कुब-  
मा दिवा स्वाप्सोरिति ।

(iv) अथैनामुदगुल्य सञ्चयति प्राक्षरसमुदक्पदं देवदेवत्ये ।

(v) वाचार्थं ऋत्विक् स्वातकी राजा विवाहः प्रियोऽतिथिरिति । परिसंवत्-  
सरानईवेयुः ।

(GROUP C)

EIGHTH PAPER

FIRST HALF

Examiner—DR. AMARESWAR THAKUR, M.A., PH.D.

Attempt FOUR questions, including Question 1.

[Full marks—75.]

1. Quote Yājñavalkya's text on *prescription* and note his difference. 24  
if any, from Manu on this point. Fully explain this text and discuss the  
theories that have arisen out of it.

2. How should the veracity or otherwise of a witness be tested? 17  
What are the punishments prescribed for perjury? How does the  
Mitākṣhara amplify the rule embodied in the text of Yājñavalkya?

3. Define *svatva* and state whether it is *laukika* or *śāstrīya*. What 17  
are the different modes of acquiring it? Give the substance of the  
discussion as to whether *partition* can lead to ownership.

4. Define *stridhana* and write a clear note on its inheritance. 17

5. Note the distinction between *sāhasa* and *steya*. Give the general 17  
rules regarding the punishment of thieves and mention in this connection  
the duties and responsibilities of the village-headman and of the king to  
the villager robbed.

6. Explain any four of the following verses and state in what connec- 17  
tion they occur in the Yājñavalkya-smṛti :—

(a) अरोगिणीं आहृतमतीमसमानार्थमोषजाम् ।

पञ्चमात् सममाहूय माहतः पिबतसाया ॥



- (b) अथाः सर्वेषु वेदेषु श्रोत्रियो ब्रह्मविद् युवा ।  
वेदार्थविद्वद्भ्योऽसामा विमधुस्त्रिसुपर्णकः ॥
- (c) निम्नरे भावितो दद्याद्भनं रात्रे च तत्समम् ।  
मिथ्याभियोगी हिगुचमभियोगाद्भनं वहेत् ॥
- (d) खं समिताम्बुविक्रीतं क्रेतुर्दोषोऽप्रकाशितः ।  
हीनाद्रही हीनसूत्र्ये बेलाहीने च तस्करः ॥
- (e) अनरा जन्ममरणे शेषाहीभिर्विगुध्यति ।  
गर्भंभावे मासतुल्या निशाः शुद्धं स्तु कारणम् ॥
- (f) बालबासा जटो वापि ब्रह्महत्याव्रतं चरेत् ।  
पिण्याकं वा कषाण् वापि भक्षयेन्निसमा निशि ॥

## SECOND HALF

Examiner—DR. SUDHENDUKUMAR DAS, M.A., PH.D.

[Full marks.—25.]

Translate into Sanskrit :—

25

Verily, O Gārgī, at the command of that Imperishable (Akshara) the sun and the moon stand apart. Verily, O Gārgī, at the command of that Imperishable the earth and the sky stand apart. Verily, O Gārgī, at the command of that Imperishable the moments, the hours, the days, the nights, the fortnights, the months, the seasons, and the years stand apart. Verily, O Gārgī, at the command of that Imperishable some rivers flow from the snowy mountains to the east, others to the west, in whatever direction each flows. Verily, O Gārgī, at the command of that Imperishable men praise those who give the gods are desirous of a sacrifice, and the fathers [are desirous] of the Manes-sacrifice. Verily, O Gārgī, if one performs sacrifices and worship and undergoes austerity in this world for many thousands of years but without knowing that Imperishable, limited indeed is that work of his. He who departs from this world without knowing that Imperishable is pitiable. But, O Gārgī, he who departs from this world knowing that Imperishable is a Brahman. Verily, O Gārgī, that Imperishable is the unseen Seer, the unheard Hearer, the unthought Thinker, the ununderstood Understander. Other than It there is naught that sees. Other than It there is naught that hears. Across this Imperishable is space woven warp and woof.

## (GROUP D)

## FIFTH PAPER

## FIRST HALF

Examiner—DR. SURENDRANATH DASGUPTA, M.A., PH.D.

प्रश्नद्वयं समाधियम् ।

1. कौटुम्भं प्रत्यक्षैर्विध्यम् ? तस्मीकारे च कोपपत्तिः ?
2. ब्रह्मसाक्षात्कारस्य तत्त्वमस्यादिवाक्यजन्यत्वे कथं न ब्रह्मस्यो इतिव्याप्यत्वम् ? इतिव्याप्यत्वे वा कथं नस्य विचारिता ?

3. परिभाषाकारमने सामान्यप्रत्यासत्तिः स्वीक्रियते न वा ? तदस्वीकारे च भूमत्वेन सकलभूमीपस्थितिं विना कथं व्याप्तिज्ञानम् ? कथं वागुमानस्य सम्भवः ?
4. कीदृशं त्रुण्णित्यात्वम् ? प्रत्यक्षागुमानागमैर्वा कथं तत्साध्यते ?
5. अनुपलब्धिप्रमाणस्वीकारे कोपपत्तिः ? वेदान्तिनयैर्विद्यानिवृत्तेः किंरूपत्वम् ?
6. वेदान्तसाररीत्याऽद्वितीयात्मविज्ञानप्रणाली वर्णनीया ।

## SECOND HALF

Examiner—MR. SATKARI MUKHERJEE, M.A.

The figures in the margin indicate full marks.

Answer ANY THREE questions, of which the LAST must be one.

1. What is the necessity of postulating Vṛtti? Discuss any one of the alternative views as embodied in the couplet :—

इच्छेत्सिद्धपरागो वा अमेदव्यक्तिरेव वा ।

फलमावृत्तिमङ्गो वा ... .. ॥

2. Write a short thesis on some of the important conceptions of the nature of the Śākṣin. What is the philosophical necessity of positing the existence of Śākṣin over and above the psychological ego? 12½

3. Write a short dissertation on the theory of perception as propounded in the Pañcadaśī with particular reference to the distinction between perception of fact (viśayapratyakṣa) and perception of knowledge (jñāna-pratyakṣa). 12½

4. Fully bring out the philosophical implications of the following 12½ śloka :—

(a) नाहं ब्रह्मेति बुध्येत स विनाशोति चेन्न तत् ।

सामानाधिकरण्यस्य बाधायामपि सम्भवात् ॥

(b) मणिप्रदोपप्रभयोर्मणिं बुद्ध्याभिधावतः ।

मिथ्याज्ञानाविशेषेऽपि विशेषोऽर्थक्रियां प्रति ॥

c, निरुधः । न विधानेन भावादात्मनोऽज्ञातिका ।

गुणस्यापि ससाधित्वाद्यथा नोक्तिरस्य ते ॥

5. Translate the following passage into English :—

25

भवेदेतदेवं यदि प्रेक्षावत्प्रवृत्तिः प्रयोजनवत्तया व्याप्ता भवेत् । ततस्तद्विहारी निवर्त्तते, शिंशपालमिव हृष्टतानिहरी । न त्वेतदस्ति, प्रेक्षावतामननुसंहितप्रयोजनानामपि यादृच्छिकानु क्रियासु प्रवृत्तिदर्शनात् । अन्यथा "न कुर्वीत हृषा चेष्टाम्" इति धर्मसूचकतां प्रतिषेधो निर्विषयः प्रसज्येत । न चोन्मत्तान् प्रत्येतत् स्वमर्षवत्, तेषां तदर्थबोधतदनुष्ठानानुपपत्तेः । अपि चादृष्टहेतुका चीत्पत्तिकी श्वासप्रश्वाससंज्ञया प्रेक्षावतां क्रिया प्रयोजनानुसन्धानमन्तरिणं दृष्टा । ..... यथा च स्वार्थपरार्थसम्पदासादित-समसाकामानां कृतकृत्यतया अनाकुलमनसामकामानामिव सत्यपि अनुनिष्पादनि प्रयोजने नैव तदुद्देशेन प्रवृत्तिरिव ब्रह्मकोऽपि जगज्जने प्रवृत्तिर्नानुपपत्ता । दृष्टं यद्व्यवसायीर्यनुद्गीमानमश्वमतिदुष्करं वा तदव्यवसानस्यवत्तुद्गीमानां सुशकनीयत्वरं वा ।

न हि वानरैर्मातृतिप्रभृतिभिर्नगैर्न बद्धो नीरनिधिरगाधो महासत्त्वानाम् । न चैव पार्थेन  
शिलीमुखैर्न बहः । न चार्थं न पीतः सन्धिष्य चुलुकेन हेलयेव कलशयोनिना महा-  
मुनिना । न चाद्यापि दृश्यन्ते लीलामात्रनिर्मितानि महाप्रासादप्रमदवनानि श्रीमन्नृग-  
नरेन्द्राणामन्वेषा मनसापि दुष्काराणि नरेन्द्राणाम् । तस्माद् उपपन्नं यदृच्छया वा  
स्वभावाद वा लीलया वा जगत्सृजनं भगवतो महेश्वरस्येति ।

## (GROUP D)

## SIXTH PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner*—MM. N. S. ANANTAKRISHNA SASTRI

[Full marks—75.]

1. अध्यासभाष्यस्य जिज्ञासासूत्रेण कः सम्बन्धः ? चैतन्यस्वरूपे कथमविद्या 15  
सम्बन्धः ? ब्रह्मणः प्रसिद्धत्वाप्रसिद्धत्वयोर्विचारायोगस्य परिहारः कः ? सर्वं  
विविच्यताम् ।

2. ब्रह्मणः प्राप्यत्व-विकार्यत्व-संस्कार्यत्वादसम्भवः कथं साधितः ? कथं च भाष्ये 15  
ज्ञाने विध्यसम्भवः समर्थितः ? क्रियापराणामेव वाक्यानां प्रामाण्यमिति सीमांसकाभिमत-  
नियमस्य कुत्र कुत्र व्यभिचारः ? सर्वं निष्कृत्यताम् ।

3. प्रधानकारणवादः केषु केषु अधिकरणेषु कथं कथं निरस्तः ? सांख्य-पातञ्जल 15  
वैशेषिक-नैयायिक-सौगतपाश्चात्तपाश्रयपतादीनां कथमद्वैतविरोधित्वम् ?

4. अद्वैतासाधारणानि पञ्चवेदान्तवाक्यानि सूत्राणि वा संगृह्य कथमत्र श्रीभाष्य- 15  
काराणां व्याख्यानान्तरं न विरुद्धमिति विविच्यताम् ।

5. अधोलिखितानि सूत्राणि विषयवाक्यसंग्रहपूर्वकं सति मतभेदे तन्निर्देशपूर्वकं 15  
च व्याख्यायताम् :—

(1) चानन्दमयोऽभ्यासात् ; (2) अत्ता चराचरयदृशात् ; (3) मध्यादिष्वसम्भवाद-  
नधिकारं जैमिनिः ; (4) उत्तराश्चेदाविर्भूतस्वरूपस्तु ; (5) कार्यं बादरिरस्य गत्युपपत्तेः ।

## SECOND HALF

*Examiner*—DR. SUDHINDRA KUMAR DAS, M.A., PH.D.

Translate into Sanskrit any one of the following passages :—

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(a) If you say that the one-ness of Brahman is his real nature, whereas Bheda is due to an overflow of Avidyā, we ask : With regard to whom is this overflow of Avidyā ? It cannot be said of Brahman, because he is of the nature of Pure Knowledge. Nothing else, as Jīva, etc., really exists by his side to which Avidyā can be ascribed. If you say that Avidyā is indeterminable (Anirvacanīyā), we do not understand to whom it is so.

If you urge that Avidyā appears (Bhāṣate) in her proper form (Svarūpeṇa) but is not determinable, you are but talking nonsense. If, again, you maintain that she is indeterminate because she cannot be grasped by reason, we ask : of what avail is that reason (Yukti) which runs counter to one's inner experience (Sampvedana) ? If you reply that Brahman is of the nature of the Existent (Sadrūpa) and is at the same time non-distinct (Abhinna) and distinction arises only by the force of Vikalpa (Constructive Imagination), we ask : to whom does this activity of Vikalpa apply ? It cannot belong to Brahman—nothing else being existent at the time. Moreover, you cannot draw a strict line of demarcation between Avikalpaka as truth and Vikalpaka as untruth, as both of them are equally manifested. If you say that Bheda is negatively obstructed (Bādhita) in experience despite its appearance, we reply that the same remark applies also to Abheda as it is obstructed by the appearance of Bheda. If this Bādhā (Obstruction) can be real (Sat) only because it manifests itself, why cannot Bheda for the same reason be real and not mere Avidyā ?

(b) Everything has a beginning and an end is therefore false. The existence of all things is like a magical or illusory elephant (Māyāhasti) and exists only as far as it merely appears or is related to experience. There is thus the appearance of production, movement, and things, but the one knowledge (Vijñāna) is the unborn, unmoved, the unthingness (Avastutva), the cessation (Sāntap). As the movement of burning charcoal is perceived as straight or curved, so it is the movement (Spandita) of consciousness that appears as the perceiving and the perceived. All the attributes are imposed upon the charcoal fire though in reality it does not possess them ; so also all the appearances are imposed upon consciousness, though in reality they do not possess them. So long as one thinks of cause and effect he has to suffer the cycle of existence (Saṃsāra), but when that nation ceases there is no Saṃsara. All things are regarded as being produced from a relative point of view only (Sampvṛti), there is therefore nothing permanent (Śāśvata). Again, no existent things are produced, hence there cannot be any destruction (Uccheda).

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(GROUP D)

SEVENTH PAPER

FIRST HALF

Examiner—MM. DR. BHAGABATKUMAR SASTRI, M.A., PH.D.

*The questions are of equal value.*

[Full marks—75.]

*Only FIVE questions to be answered.*

1. How does Rāmānuja establish that where the knowledge of Brahman is prescribed there 'आनं विधीयते ... श्रोतव्य इति आनुवादः.....मन्त्रव्य इति आनुवादः' ? What is the nature of this आनं ? Is it as good as मन्त्रव्य ? How does it in the end identify itself with मन्त्र ? Why is this identity sought for by Rāmānuja ?

2. Establish after the manner of Rāmānuja—‘निर्विशेषवस्तुवादिभिर्निर्विशेषे वस्तुनोद् प्रमाणमिति न शक्यते वक्तुम्’ । How does Rāmānuja prove ‘निरविकल्पकमपि (प्रत्यक्षं) सविशेषविषयमेव’ ? How are निर्विकल्पकप्रत्यक्ष and सविकल्पकप्रत्यक्ष explained in other systems of philosophy ?

3. Fully explain, with a clear reference to and exposition of the rival view :—

‘अद्वयज्ञो मामर्थं च न जानामि’—इत्यचोपपत्तिसिद्धिर्नेन केवलीन च प्रत्यक्षेण न भाव-  
रूपमज्ञानं प्रतीयते ।

4. “सर्वं विज्ञानजातं यथार्थमिति सिद्धम् । ख्यात्यन्तराणां दूषणानि तैलैर्वादिभिरेव प्रपञ्चितानि” ।

Fully explain Rāmānuja's view and the rival views in this connection, and refute the other views from Rāmānuja's standpoint.

5. Fully explain the view :—

‘विचित्रावयवसन्निवेशविशेषतनुभुवनादिकार्यनिर्माणे पुण्यपापपरवशः परिमितशक्तिज्ञानः  
क्षेत्रज्ञो न प्रभवतीति निखिलभुवननिर्माणचतुरोऽचन्यापरिमितज्ञानशक्तौऽश्रयोऽशरीरः संकल्प-  
भावसाधनपरिनिष्पन्नान्निर्विस्तारविचित्ररचनप्रपञ्चः पुरुषत्रिंशेष ईश्वरोऽनुमानेनैव सिध्यति’...  
किञ्च ‘अत्यन्तभिन्नयोरेव अदृश्यकुलालयोर्निमित्तोपादानत्वदर्शनेन आकाशादेर्निरवयवद्रव्यत्वात्  
कार्यत्वानुपपत्त्या च नैकमेव ब्रह्म कृतस्य जगती निमित्तमुपादानञ्च प्रतिपादयितुं शक्नोति’ ।

How does Rāmānuja prove the hollownness of these contentions ?

6. Explain the apprehensions :—

वेदान्तवाक्यानां प्रवृत्तिनिवृत्तिप्रयोजनविधुरत्वाद् ध्यानविशिष्टेष्वेऽपि ध्येयविशेषस्वरूप-  
समर्पणभावपर्यवसानात् स्वातन्त्र्येऽपि बालातुराद्युपच्छन्दनवाक्यवत् ज्ञानमात्रेणैव पुरुषार्थ-  
पर्यन्ततासिद्धेः परिनिष्पन्नवस्तुसत्यतागोचरत्वाभावाद ब्रह्मणः शास्त्रप्रमाणकत्वं न सम्भवति ।

How are the apprehensions removed ?

7. Sum up, from the prescribed portions of your text, Rāmānuja's views about Soul, Nature, and God, and shew how they materially differ from Sāṅkara's views. What difference in the fundamental psychological standpoints leads to this difference of views ?

## SECOND HALF

Examiner—MM. GURUCHARAN TARKA-DARSANTIRTHA

[Full marks—25.]

विश्वेकतमस्य उत्तरं कार्यम् ।

1. बौद्धानां विज्ञानवादः कीदृशः ? तत्खण्डने च अद्वैतवादिसम्भता का युक्तिः ?
2. न्यायसम्भतः सृष्टिक्रमः कीदृशः ? तत्र वेदान्तिकासम्भतौ च को हेतुः ?
3. दैयाधिकसम्भतासत्तायाः खण्डने अद्वैतिसम्भता युक्तिः कीदृशी ?

## (GROUP D)

## EIGHTH PAPER

## FIRST HALF

*Examiner*—MR. KOKILESWAR BHATTACHARYYA, M.A.

*The questions are of equal value.*

*Only FIVE questions to be answered*

*[Full marks—50.]*

1. Explain, after Sankara, the following two stanzas, and try to suggest a solution of their apparent contradiction :—

(a) योगसंन्यसकर्म्याणां ज्ञानसंक्षिप्तसंशयम् ।  
आत्मवन्तं न कर्माणि निबध्नन्ति धनञ्जय ॥

(b) संन्यासः कर्मयोगश्च निःश्रेयसकरावुभौ ।  
तयोस्तु कर्मसंन्यासात् कर्मयोगो विशिष्यते ॥

2. (a) Comment philosophically on the following :—

“चेत-चेतस्त्री येन ज्ञानेन विषयीक्रियते तज्ज्ञानं सव्यक् ज्ञानमिति मतं मन” ।

(b) Give some of the different interpretations of the following line as suggested by Sankara together with your own view :—

“ब्रह्मणो हि प्रतिष्ठादममृतमव्ययस्य च” ।

3. Write a short note on the विश्वरूप described in the Gītā.

4. What do you understand by the term प्रागभाव as employed by the Naiyayikas? Show by what arguments Sankara has established the Vedantic सत्-कार्यवाद, after refuting the असत्-कार्यवाद ।

And in this connection explain the following line :—

“रज्जाद्यवयवैः सर्गादिसंस्थानवत् बुद्धिपरिकल्पितैः सदवयवैः विकार-संस्थानोपपत्तेः” ।

5. Write philosophical notes on विश्व, तैजस, प्राज्ञ and तुरीय—as explained by Sankara in the *Māṇḍūkya* Upanishad, showing their interrelation.

6. How would you reconcile the illusoriness of the world with the following :—

“यदि हि असतामिव जगत् स्यात् ब्रह्मणोऽव्यवहार्यस्य रहस्यव्यापकभावात् असत्त्वप्रसङ्गः” ।

## SECOND HALF

*Examiner*—MR. BANAMALI VEDANTATIRTHA, M.A.

*The figures in the margin indicate full marks.*

*[Full marks—50.]*

1. Write a short essay, quoting or referring to verses of the *Kāṭhakopaniṣad* in support of your statements, on the means (*upāya*) that are to be adopted in order to know the self. 19

Or,

Examine the doctrine that the conception of *māyā* is foreign to the *Bṛhadāraṇyaka Upanishad*.

2. (a) Explain fully :—

8

(i) जात एव न जायते को न्वेन जनयेत् पुनः ।

विज्ञानमानन्दं ब्रह्म राति दातुः

परायणम् तिष्ठमानस्य तद्विदः ॥

(ii) ऊर्ध्वं प्राणमुन्नयति आपानं पथ्यगच्छति ।

मध्ये वामनमासीनं विश्वे वेदा उपासते ॥

Or,

(i) स्वप्नान् जागरितान् चोभौ येनानुपश्यति ।

महान् विभुमात्मानं मत्वा धीरो न शोचति ॥

(ii) ओं पूर्णमदः पूर्णमिदं पूर्णात् पूर्णमुदच्यते ।

पूर्णस्य पूर्णमादाय पूर्णमेवावशिष्यते ॥

(b) Give a summary of the teachings of the Maitreyi Brāhmana (Bṛh. Up. IV. 5).

7

3. Translate into English :—

25

एतेन सव व्याख्याताव्याख्याताः ( ब. सू. २।४।२६ ) ।

अथ पुरुषसूक्तादीनां ब्रह्मबोधकत्वमस्ति न वेति संशयः । संशयबीजं प्रकरण-  
भेदादिकम् । कर्मप्रकरणगतानां पुरुषसूक्तादीनामनुष्ठातृजीवपरत्वमेव समीचीनम्, न  
नित्यसूक्त-ब्रह्मविषयत्वं प्रयोजनाभावात् । स्मृतिपुराणादीनामपि नैकार्थपरत्वमस्ति यतस्तेषु  
कतिचित् ब्रह्माणं परं ब्रह्मेत्याहुः कतिचिद् विश्वम् कतिचिद्द्रुदं कतिचिच्च शक्तिम् ।  
एवमनवस्था भवति इत्यतः एतेषां न ब्रह्मबोधकत्वम् ।

इति प्राप्ते ब्रूमः । पुरुषसूक्तादीनां ब्रह्मबोधकत्वमस्ति तज्ज्ञिगददर्शनात् ।  
तस्याद् विराडजायत आदित्यवर्णं तमसस्तु पारि तमेवं विद्वानमृत इह भवति इति  
सकलकारणत्व-तमः परत्वाद्भूतहेतुत्वादीनां परमेश्वरलिंगानामत्र संबन्धो दृश्यते ।  
अतएवात्र पुरुषशब्देन ईश्वरः प्रतिपाद्यते । शतरुद्रीये च साक्षात् परमेश्वरस्य जगदाधिपत्यं  
जगदात्मकत्वं नौलघौवत्वादिलक्ष्यं च श्रूयते । ननु परमेश्वरस्य संगलगुणैकनिधानस्य  
शतरुद्रीयप्रतिपाद्यत्वमयुक्तमिव प्रतिभाति । “मन्वे” इति हेयगुणमनुसम्बन्धावगमात्  
इति चेत्, नैवं विचारणीयम् । मन्वशब्दस्यात्र यज्ञवाचकत्वात् । अथवा क्रोधपर्यायत्वेऽपि  
न दीवः, दुष्टनियद्वार्थं स्वेच्छादृष्टीतप्रकृतिगुणनेमास्य परमेश्वरे सम्बन्धाभावात् । पुराणा  
दीनां च तात्पर्यलिंगवशेन ब्रह्मविष्णुादित्यशब्दशब्दार्थं सर्वोत्तमं सर्वज्ञं सर्वशक्तिकं  
सर्वाधिकमन्यमानां न्यवैभवं ब्रह्मशब्दार्थविश्रान्तिपदं निर्विखलवेदान्तवाक्यसाभारय समन्वय-  
तात्पर्यपर्यवसानविषयं शिवसुमासङ्गितं परमेश्वरं प्रतिबोधकत्वं युक्तमिव । यदुक्तं कर्म-  
प्रकरणमिति तत्र लिङ्गेन प्रकरणाधी युक्तः । अनेनैव न्यायेन यद् यद् चेतनेऽचेतने  
वा जगत्कारणत्वादिकं शिवतात्पर्यलिंगं श्रूयते वेदादिषु प्रमाणवचनेषु तत्र तत्र तदात्मा  
शिव एव वाच्यः । यद् यद् अपुरुषार्थविकाराश्रयादिको धर्मलक्ष्यं तत्र शिवस्य परब्रह्मत्वः  
शरीरं चिदचित्तमेव बोध्यम् ।

## (GROUP E)

## FIFTH PAPER

## FIRST HALF

Examiner—DR. PRABHATCHANDRA CHAKRABARTI, M.A., PH.D.

[Full marks—50]

Answer either Question 2 or 5 and ANY TWO of the rest.

1. (a) What arguments have been advanced to establish the fact that an entity does not come out of non-entity ? 16

(b) What is the force of ईदृश in the aphorism 'ईदृशेश्वरसिद्धिः सिद्धा' ?

2. (a) State the ground on which the Sāṃkhya school supported the reality of the world in contradistinction to the Vedānta doctrine of unreality. 18

(b) What system of Hindu philosophy interprets *mukti* as the manifestation of eternal joy? How does the aphorism 'नानन्दमिव्यक्ति-सु'क्तिनिर्घर्षकत्वात्' refute it ?

3 (a) What evidence is there for the assumption of a subtle body ? How do you distinguish a gross body from a subtle one ? 16

(b) Has the world a beginning ? If so, does it evolve from *prakṛti* or *puruṣa* ? Give reasons for your answer.

4. (a) Show from the Sāṃkhya point of view that the *summum bonum* of life (*paramā-puruṣārtha*) is only attainable through the entire cessation of pain. 16

(b) Write a short essay on : 'न कुवापि कोऽपि सुखीति' ।

5. (a) Explain the following *sūtras* after Aniruddha :— 18

वासावं तु न तस्मै चित्तस्थितेः । मुक्तबन्धयोरन्यतराभावात् तत्सिद्धिः । न नित्यत्वं वेदानां कार्यत्वमुनेः । न कारणत्वात् कृतक्यता मयवदुत्थानात् ।

(b) Elucidate the following *vṛtti* :—

'यत्सत्त्वसिद्धिमित्यनुमानशब्दी व्यवच्छिन्नो । तन्प्रत्यक्षमिति सविकल्पकमपि प्रत्यक्षं संगृहीतम् । बोद्धास्तु निर्विकल्पकमेव प्रत्यक्षमिति वक्ष्यन्ति,—कल्पनापोदमथानं प्रत्यक्षमिति' ।

## SECOND HALF

Examiner—MR. KOKILESWAR BHATTACHARYYA, M.A.

[Full marks—50.]

1. Enumerate the three sorts of pain or suffering (दुःखवत्)—the imperfections 'flesh is heir to'. What are the ordinary remedies suggested by which they may be obviated ? 6

Why is the cure of worldly evil not to be effected by such remedies as are of ordinary application ?



2. Fully explain and meet the objection against Sāṃkhya that 'if effect exists already, it is absurd to produce what is already extant'.

Or,

Discuss the Sāṃkhya view of *प्रज्ञा*'s.

3. "रूपैः सप्तभिरेव ब्रह्मात्मनामात्मना प्रकृतिः

सैव च पुरुषार्थं प्रति विमोक्षयत्येकरूपेण ।"

Here, what are those *seven* modes by which Nature (*प्रकृति*) binds herself of her own accord, and she liberates herself by one mode? What is that *one* mode and how is it produced?

What do you understand by '*पुरुषार्थ*'?

4. Translate the following extracts into English :—

(a) पुरुषो यतो दाशंतविषयो बुद्धिमत्त्वेन निवेदितविषयोऽतः सत्त्वे तत्प्रमाने प्रतिबिम्बरूपेण बुद्धिसत्त्वसमानाकारो भवन्नतु तप्यत इति मूर्द्धैर्दृश्यते अनुतप्यत इवेत्यर्थः । न तु स्वाकारप्रतिबिम्बानातिरिक्तं विषयनिवेदनमपरिणामिनि संभवति । तथा च प्रतिबिम्बरूपेण भोगाद्यसत्त्वत्वेन विदुषामपि दुःखस्य हेतुत्वात् पुरुषार्थसंभवदोषः ।

(b) यद्यपि प्रति प्रतिबिम्बं असतोऽत अनुगच्छतोति व्युत्पत्त्या असंकुचित-सर्वानुगतः परमात्मैव मुख्यः प्रत्यक्षशब्दाद्यः ; तथापि ईश्वरादिशब्दवदेव प्रत्यक्षशब्दोऽपि जीवे गौणोऽवमुत्वात् । अतएव प्रकृतिव्यावर्तनाय चेतनेत्युक्तम् । यदि च प्रत्यक्षशब्दः पश्चिमवाच्यो तथापि सर्वप्रत्ययवधिभूते ब्रह्मण्येव मुख्योऽन्यत गौण इति ।

### (GROUP E)

#### SIXTH PAPER

#### FIRST HALF

Examiner—MM. DR. BHAGABAT KUMAR SASTRI M.A., PH.D.

*The questions are of equal value.*

[Full marks—50]

*Only FOUR questions to be answered, but the 7TH or the 8TH must be one of those four.*

1. Explain *इतिज्ञान* and *फलज्ञान* according to the Sāṃkhya system. How does *प्रज्ञा* arise? How far does it affect the *पुरुष*? Explain the different Sāṃkhya views in this connection.

2. What sorts of *बन्ध* are explained in different schools of philosophy? How does the Sāṃkhya school refute the other view points?

3. How are the *तन्मात्र*'s, *इन्द्रिय*'s, *अहंकार*, *बुद्धि*, *प्रकृति* and *पुरुष* to be inferred according to the Sāṃkhya system? Fully exhibit the modes of inference.

4. How is the final cause inferred or established in other systems of philosophy? How does Sāṃkhya refute their views?

5. 'There is one soul and not more than one and there is nothing but the soul.' Can this view stand? Can आनन्द be proved to be a constituent part of the soul?

6. What different views about स्रष्टा are held by different philosophical schools? What is the Sāṃkhya view? Does it differ from the Yoga view? How far does the mere idea of the external world prove its existence according to Sāṃkhya?

7. "तत्र यद् यस्माद् जायते तस्य तदापूरणेनैव स्थितिः। ततस्तस्य संसारोऽपि तथैव भवति" ।

Fully explain this mode of आपूरण in the light of Vijñāna-bhikṣu's interpretation. Do the other schools of interpretation fully agree with Bhikṣu?

8. Fully explain :—

चिन्मात्रानन्तशक्त्यञ्चै पुमर्धपवनेरिताः ।  
 सत्त्वादिशक्तयो यान्ति विश्वदुदरुपताम् ॥  
 अत ईशसिदात्मैव जगतः सन्निधानतः ।  
 मणिवत् प्रेरकत्वेन जडानामयसामिव ॥.....  
 सर्वशक्तिमयो ह्यात्मा शक्तिमण्डलतान्दवः ।  
 संसारं तन्निवृत्तिश्च माययाप्नोति ह्येतया ॥

## SECOND HALF

*Examiner*—MR. NALINI MOHAN SASTRI, M.A.

[Full marks—50.]

1. Translate into Sanskrit :—

25

*Either,*

(a) The reality of a higher active faculty in us, is made certain by the fact of *moral law*, which is nothing else than a law spontaneously imposed on the will by reason itself. The moral law stands high above lower active faculty in us, and with an inward irresistible necessity, orders us, independence of every instigation of sense, to follow it absolutely and unconditionally. All other practical law relate solely to the empirical ends of pleasure and happiness; but the moral law pays no respect to these, and demands that we shall pay them none.

*Or,*

(b) From the proposition, 'I think, therefore I am,' there follows the whole constitution of the nature of spirit. In investigating, namely, who then are we, who thus hold all things for false that are different from us, we see clearly that without destroying our personality, we can think away from ourselves everything that belongs to us, *except* our thought alone. Thought persists even when it denies all else. There cannot belong any extension, therefore, any figure, or anything else that the body may possess, to our *true nature*. To that, there can belong our thought only. I am then essentially a thinking being, that is to say spirit, soul, intelligence, reason.

2. Determine the functions of *Manas*, *Buddhi*, *Ahaṁkāra* and *Sākshma-śāstra* in the evolution of the Universe after the manner of *Tattvakaumudī*. 12½

8.

*Either,*

12½

Give a clear exposition of the final end of the Sāṅkhya philosophy and of the means of attaining it. What are the three kinds of *Bandha*?

*Or,*

How does *Vāchaspati Miśra* reckon the Sāṅkhya as *Āpta-Sruti*? Examine his arguments against *Vivartavāda*. Elucidate the following verse quoted by him :—

असत्त्वे नास्ति सम्बन्धः कारणैः सत्त्वसङ्गिभिः ।

असम्बन्धस्य चोत्पत्तिमिच्छतो न व्यवस्थितिः ॥

(GROUP E)

SEVENTH PAPER

FIRST HALF

Examiner—MM. PANDIT SITARAM SASTRI

[Full marks—75.]

किमपि पञ्च-पञ्चकं व्याख्यायताम् ।

1. ईश्वरस्वीकारावश्यकत्वं तत्स्वरूपं तत्र प्रमाणं च प्रदर्श्य तस्य प्रवृत्तिप्रयोजनं 15  
सम्बन्धिविच्छिन्नाम् ।

2. ईश्वरप्रणिधानस्य स्वरूपं फलं च प्रतिपाद्य ततः स्वरूपदर्शनप्रणाली भाष्यकृदु- 15  
प्रदर्शितोपन्यस्यताम् ।

3. अनुराधान् संख्यातो नामतो लक्षणतश्च निरूप्य तत्प्रतिकारोपायो युक्तियुक्तो 15  
विलिख्यताम् तदुपायस्वीकारो यन्मते यथा न संभवति तदथाभावं संप्रदर्श्य सिद्धान्ते  
तद्दोषाप्रतिप्रकारः प्रदर्श्यताम् ।

4. विषयवर्तौ ज्योतिष्कालोः प्रवृत्त्योर्लक्षणे फले च प्रतिपाद्य समापत्तेः स्वरूपं भेदाच्च 15  
सर्वस्वरं विलिख्यताम् ।

5. अवयव्यस्वीकृतमृतं संप्रतिपाद्य तत्स्वीकारवाच्योयुक्तिं विशदं संप्रदर्श्य 15  
वितर्कविचारानुगतसमापत्तिरूपाणि सोदाहरणं निरूप्यताम् ।

6. कर्माशयस्थैकभक्तित्वानेकभक्तित्वद्वष्टग्न्यवेदनीयत्वाद्वष्टग्न्यवेदनीयत्वादि 15  
सर्वस्वरं निरूप्य “न चोक्तगैस्यापवादान्निवृत्तिरित्येकभक्तिः कर्माशयोऽनुश्रयते” इति  
भाष्यपङ्क्तेश्चोक्तो विस्पष्टं निरूप्यताम् ।

7. परिणामतापसंस्कारदुःखतानां स्वरूपाणि प्रदर्श्य दृश्यस्वरूपं यथामुच्यमाणं 15  
विलिख्यताम् ।

8. (a) शब्दार्थप्रत्ययानां संकरं सोदाहरणं निरूप्य तत्प्रविभागे संयमकृतं 15  
प्रदर्श्यताम् । (b) वस्तुनो ज्ञानानतिरिक्तत्ववादभेकचित्ततत्त्वत्वाद् च निरूप्य  
तन्निराकरणं समुक्तिं प्रदर्श्यताम् ।

9. (a) नीचे आत्मनः स्वरूपे वेदान्तिमतं संप्रतिपाद्य योगनयेन तन्निरस्य 15  
योग्यमिततः सिद्धान्तः प्रतिपाद्यतां यथा-भोजयति । (b) अभिव्यञ्ज्यायाधिष्ठितैः  
स्वरूपं तत्स्वीकारावश्यकत्वं तत्र दर्शनान्तरकाराणां विप्रतिपत्तिस्तन्निरासप्रकारस्य  
प्रदर्शयन्तां यथा-भोजयति ।
10. योगव्यासाधारणं फलं वार्त्तिककाररीत्या विशदं निरूप्यताम् । 15
11. जीवेश्वरयोर्विषये प्रतिबिम्बवादमवच्छेदवादं च सुनिर्दिष्टं योगाभिप्रेतः 15  
सिद्धान्तो यथावार्त्तिकं निरूप्यताम् ।
12. योगस्य लक्षणं यथावार्त्तिकं सम्यग् निरूप्य, ईश्वरस्य भोगविषये वार्त्तिक- 15  
कारमतं सयुक्तिं विशदं निरूप्यताम् ।

## SECOND HALF

Examiner—MR. DEBENDRANATH RAY, M.A.

[Full marks —25 ]

1. Translate into English :—

25

(a) अथ कोऽयमात्मा ? ननु संविदेव न तु चैतनाविशिष्टदेह इत्युक्तम्,  
अशरीरं वावसन्नं प्रियाप्रिये न स्पृशत इत्यादि-श्रुति-भाषायात् । सा खलु संविद  
अनुभूतिज्ञानावगतिपथ्याया सकलविषयावबहिषी निराश्रया च । सा हि चिद्रूपा  
स्वयं-प्रकाशा न तु अनुभवितुरात्मनो धर्मविशेषः । अविक्रियस्यात्मनो ज्ञानक्रियाकर्तृत्व-  
रूपं ज्ञातृत्वं न सम्भवति । कर्तृत्वादिर्हि रूपादिवद् दृश्यधर्मः । कर्तृत्वे च अहं-  
प्रत्ययगोचरत्वे च आत्मनोऽभ्युपगम्यमाने देहछेदे तस्य पराक्ताजडत्वादिप्रसङ्गः स्यात् ।

(b) संक्षेपेण विविध एव प्रस्थानभेदः । तन्मात्रश्रवणवाद एकः । परिणाम-  
वादो द्वितीयः । विवर्तवादतृतीयः । चतुर्विधाः परमाण्वो ब्रह्माण्डपर्यन्तं जगदा-  
रम्भन्ते ; असदेव कार्यं कारकं व्यापाराद् उत्पद्यते इति प्रथमः । त्रिगुणात्मकं  
प्रधानमेव जगदाकारेण परिणमते ; पूर्वमपि सूक्ष्मरूपेण सदेव कार्यं कारणव्यापारेण  
अभिव्यज्यते । ब्रह्मणः परिणामो जगत् इति वा द्वितीयः । सच्चिदानन्दमद्वितीयं  
ब्रह्म स्वमायावशान् मिथ्यैव जगदाकारेण कल्प्यते इति तृतीयः पक्षः ॥

(GROUP E)

EIGHTH PAPER

FIRST HALF

Examiner—MM. DURGACHARAN SANKHYA-VEDANTATIRTHA

The questions are of equal value.

( एषु प्रश्नेषु प्रश्नत्रयस्योत्तरं दीयम् । )

1. को नाम अविनाभावः ? स च कथं चार्वाकैः खण्डितः ? किमर्थं वा  
बीजैः समर्पितः ? तत्संख्येय-समर्पणप्रकारस्य कीदृशः ? अविनाभावस्वीकारे चार्वाकाणां

का चतिः, बौद्धानां वा की लाभः ? चार्वाकमते चाकाशस्य भूतवर्गं सन्नविशीऽस्ति न वा ? नास्ति चेत्, तस्य कस्मिन्नन्तर्भावः ? 'चार्वाक'शब्दस्य कौटुम्भी व्युत्पत्तिः ? सर्वमेतदध्याययमुच्यताम् ।

2. "षट्केन युगपद् योगात् परमाणीः षड् शता ।

तेषामप्येकदेशेऽपि पितृः स्यादसुमावकः ॥"

विशदय्याख्यानेन श्लोकोऽयं स्पष्टार्थः कियताम् । केन किमर्थमयं श्लोकः समुद्धृतः ? तदभिप्रायसिद्धौ चास्य श्लोकस्य कौटुम्भी उपयोगः ? 'षट्केन' इति पदेनात्र कौटुम्भी षट्कं विवक्षितम् ? बौद्धानां सौचान्तिक-वैभाविक-योगाचार-माध्यमिकेति संज्ञा-भेदे किं कारणम् ? तेषां मतभेदाद्यं संक्षिप्य निरूप्यताम् ।

3. शङ्करसम्मतमविद्यानुमानमुपस्थाप्य रामानुजोपदर्शितं तत्प्रतिप्रयोगं च यथायथं प्रदर्श्य, तयोः कतरः पक्षः श्रोमाद्भः साधयान् मन्वते, युक्ततः प्रतिपादयतां तत् । जीवस्य स्वरूपे, मोक्षे, तदुपाये च शङ्कर-रामानुजमतयोः कौटुम्भी भेद इत्येतदपि निरूप्यताम् ।

4. "विपदार्थं चतुष्पादं महातन्त्रं जगद्गुरुः ।

सूत्रैकैकं संक्षिप्य प्राह विस्तरतः पुनः ॥"

अस्य श्लोकस्य समुत्थानकारणं निर्दिश्य, के ते तयः पदार्थाः कौटुम्भाय, के वा ते षट् पादाः, किं तन्महातन्त्रम्, को वासो जगद्गुरुः, किं च तत् सूत्रम् ? सर्वमेतत् स्पष्टं निरूप्यताम् । शैवमते पञ्चभेदः कातविधः ? काश्च ता विधाः ? जीवेश्वर-बन्धनोच्चाणां स्वरूपाणि तद्भेदाश्च कौटुम्भाय इत्यापि निर्दिश्यताम् ।

5. गीतमेव वेदस्यापौरुषत्वे कौटुम्भी प्रमाणमुपन्यस्तम् ? तदुपन्यस्य

"वेदस्याध्ययनं पूर्वं गुर्वध्ययनपूर्वकम् ।

वेदाध्ययनसामान्यादधुनाध्ययनं यथा ॥"

इत्येतद्वाक्यं यदर्थमुपन्यस्य तदुपपादयताम् ।

काणाददर्शनं गीतमदर्शनं च समानतन्त्रतया प्रसिद्धम्, तयोश्च कया विधया समानत्वम् ? प्रमाण-संशय-विपर्ययादानामनात्मपदार्थानां तत्त्वज्ञां निःश्रेयसाधिगमे कथं कारणं भवति इत्येतत्पूर्वं सम्यगुपपादयताम् ।

## SECOND HALF

Examiner—MR. SATKARI MUKHERJEE, M.A.

[Full marks—50.]

Attempt ANY THREE questions, of which the LAST must be ONE

1. Write a critical estimate of the conception of *Vairāgya* as 12½ expounded in the *Yogavāśiṣṭha* Rāmāyaṇa and elucidate the philosophical basis of *Vairāgya* as a means to perfection

2. Write a short thesis on the world-view of the *Yogavāśiṣṭha* and 12½ show the place of moral and æsthetic values in this scheme of philosophy.

3. Give a brief account of the salient features of childhood and youth 12½ that have received the trenchant censure at the hands of Rāmāchandra.

## 4. Translate the following into Sanskrit :—

25

The existence of a finite world at all seems, in short, to involve the clash of individualities which tend to go their own way and seek their own ends. And if this involves an element of contingency in the world of moral action, the same would seem to be true of the world of nature which is the theatre of action. Nature . . . . . may be regarded, on the large scale of history, as the instrument of man's moral and intellectual education; but that does not mean that we are bound to take each of nature's happenings as the exponent of a particular moral purpose. The religious man will, no doubt, seek to accept whatever happens to him as from the hand of God, and by doing so he will make this account of the occurrence true, because he thereby transmutates the event into an instrument of spiritual growth. But the spirit in which he meets the experience does not, I think, imply that he traces the event, as a natural occurrence, to the operation of a particular providence. And it is needless to say that such is not the broad impression we derive from the facts of life.

## (GROUP F)

## FIFTH PAPER

## FIRST HALF

Examiner—PANDIT PANCHANAN TARKABAGIS

[Full marks—75.]

प्रथमप्रश्नस्योत्तरम् अवश्यं कर्तव्यम्।

अन्वेषां प्रश्नानां मध्ये प्रश्नचतुष्टयस्योत्तरं दीयम्।

1. भाष्यकारप्रदर्शितरीत्या प्रमाणास्य भावगृहकत्ववदभावगृहकत्वमपि समर्थम्। 15
2. “संशयादयो हि यथासम्भवं प्रमाणेषु प्रमेयेषु चान्तर्भवन्तो न व्यतिरिच्यन्त इति”। 15  
अनेदं पृच्छते, कया रीत्या संशयादीनां प्रमाणेषु प्रमेयेषु चान्तर्भावः साविशदीकृत्य कतिपयेषु स्थलेषु प्रदर्शनीया।
3. “प्रमाणैरर्थपरीक्षणं न्यायः” 15  
व्याख्यायतामिदं भाष्यं वार्तिकरीत्या।  
अपि च ‘प्रमाणैः’ इत्यत्र बहुवचननिर्द्देशेन कौटुशोऽभिप्रायः प्रकटितो ग्राह्यकारिणः ?
4. उद्दिष्टार्थसन्निकर्षोऽप्यत्र ज्ञानमव्यपदेश्यमव्यभिचारि व्यवसायात्मकं प्रत्यक्षम्— 15  
इति सूत्रम्।  
प्रतिपदव्याहनिप्रदर्शनपूर्वकं व्याख्यायतामिदम्।
5. कश्चित्तत्त्वेऽव्यभिचारिपदस्य तद्वत्तत्प्रकारकमित्याकारकेऽर्थे कर्तव्ये निर्विकल्प 16  
कस्य प्रकारविशेष्यभावरहिततया सम्भवन्तो तन्नाम्यान्तं हातकारप्रदर्शितरीत्या खण्डय।
6. प्रमाणादिपदार्थतत्त्वज्ञानान्निःशेषसाधिगम इति न्यायदर्शनस्य प्रथमवाक्यम्। 15  
अनेदं पृच्छते, कया रीत्या प्रमाणादि तत्त्वज्ञानस्य निःशेषसंज्ञेतुल्यम् ?

7. सखि बहुषु प्रमेषु आत्माद्यपवर्गपर्यन्तपदार्थस्यैव कथं प्रमेयतया उल्लेखः ? 15
8. 'साध्यानिर्देशः प्रातिज्ञा' । 15
- भाष्यकारप्रदर्शितरीत्या वृत्तिकारप्रदर्शितरीत्या च व्याख्यायतामिदं सूत्रम् ।
9. "साधर्म्यवैधर्म्याभ्यां प्रत्यवस्थानं जातिः" । 15
- उदाहरण-प्रदर्शनपूर्वकं व्याख्यायतामिदं सूत्रम् ।

## SECOND HALF

Examiner—MM. GOPINATH KAVIRAJ, M. A.

[Full marks—25.]

1. Translate into English any one of the following extracts :—

25

(a) किमयमनुमानमहिंसा स्फोटोत्पन्नगमः प्रत्यक्षप्रतीतिबलवत्तया वा ? न तावदनुमानतः स्फोटस्वरूपमुपपादयितुं पार्थते, परिदृश्यमानविशिष्टानुपूर्वी कवर्णकलाप-करणेनार्थप्रतीतिर्घटमानत्वाद् ।

ननु व्यस्तसमस्तादिविकल्पैकत्वादितं वर्णानां वाचकत्वम् । नैतत्, दुर्विकल्पात्ते, व्यस्तानां तावद् वाचकत्वं नेष्यते वर्णानाम्, समस्ता एव ते वाचकाः । यत् तत्सामर्थ्यं नास्ति क्रमभावितादिति, तदसत् । क्रमभाविनामपि समस्तानां कार्यकारिणामनेकशो दर्शनात् । यथा युगपद्भाविनः समास्त्रयो यात्राया एकासुखां धारयन्तो दृश्यन्ते, तथा क्रमभाविनोऽपि समस्ता यासा एकां तस्मिन्त्यादयन्तो दृश्यन्ते । एकस्मिन्नपि हि यासि हीयमाने न भवति तादृशी तृप्तिः । अतः समस्ता एव ते यासाः तृप्तेः कारणम् । + + एवं क्रमवर्तिनोऽपि वर्णा एवार्थाभिधायिनो भविष्यन्ति ।

(b) न शरीरस्य चैतन्यं घटादिवद्भूतकार्यत्वात् स्रुते चासंभवात् । नेन्द्रियाणाम्, करणत्वात् उपपत्तेषु विषयासान्निध्ये चानुभूतिदर्शनात् । नापि मनसः, करणान्तरान-पेक्षित्वे युगपदालोचनस्यप्रसङ्गात्, स्वयं करणाभावाच्च । परिशिषादात्मकार्यत्वात् तेनात्मा समधिगम्यते, शरीरसमवायिनीभ्यां च हिताहितप्राप्तिपरिहारयोग्याभ्यां प्रवृत्ति-निवृत्तिभ्यां रथकर्मणा सारथिवत् प्रयत्नवान् वियङ्ग्याधिष्ठाताऽनुमीयते प्राणादिभिरेति । कथं शरीरपरिपट्वीते वायौ विकृतकर्मदर्शनाद् भस्माभापयितेव निमेषोन्मेषकर्मणा नियतेन दास्यन्प्रयोजने देहस्य वृद्धिचतुर्भ्रमसंरोहणादिनिमित्तत्वात् गृहपतिरिव अभिमतविषयवाङ्मकरचसंनन्निमित्तेन मनः कर्मणा गृहकोषेषु पेलकप्रेरक इव दारकः नयनविषयलोचनानन्तरं रसानुभूतिक्रमेण रसनविक्रियादर्शनादनेकगवाचान्गत-प्रेषकवदुभयदर्शी कश्चिदेको विज्ञायते ।

(GROUP F)

SIXTH PAPER

FIRST HALF

Examiner—PANDIT PANCHANAN TARKAVAGIS

[Full marks—50.]

अधोलिखितेषु प्रश्नेषु द्वयं समाधेयम् ।

1. अक्षपाददर्शनस्य भ्रमसंशयनिरासकत्वे स्वीकर्तव्ये तत्-प्रणयनात् पूर्वमपि 25  
शास्त्रान्तरेण तन्निरसितत्वात् तादृशशास्त्रान्तरस्याद्यापि सम्भवेन तन्निरसनाय अक्षपाद-  
दर्शनस्य किं प्रयोजनमिमांशाशङ्कामपनेतुं किं समाहितं जयन्तेन ?
2. व्यायवाक्ययोदाहरणवाक्यघटिततया दृष्टान्तस्य तादृशोदाहरणवाक्यप्रति- 25  
पाद्यत्वेऽपि तस्य (दृष्टान्तस्य) स्वतन्त्रभावेन उपादाने किं प्रयोजनमिमांशाशङ्कामपनेतुं  
किं समाहितं जयन्तेन ?
3. तुल्यसामग्र्यधोनाशानार्थयोर्गोच्यतदभावस्वीकारपूर्वकं ज्ञानप्रामाण्यमिच्छतो 25  
बौद्धस्य समाधानं कया रीत्या खण्डितं जयन्तेन ?
4. कया रीत्या साकारविज्ञानवादो दूषितो जयन्तेन ? 25

SECOND HALF

Examiner—MM. GURUCHARAN TARKA-DARSHANTIRTHA

[Full marks—50.]

चतुर्थे प्रश्नसुत्तीर्यावशिष्टेषु त्रिषु प्रश्नेषु एकस्य उत्तरं कार्यम् ।

1. विविधासु कथासु यादृशीं कथामवलम्ब्य खल्वनखल्वस्वाद्ययन्यारम्भसादृश- 25  
कथायाः किं लक्षणम् ? प्रमाणानङ्गीकर्तॄणां कथं जयपराजय-व्यवस्था ?
2. खल्वनयन्याध्ययनेन श्रीमतां कौदृशः उपकारः सञ्जातः ? ज्ञानस्य स्वप्रकाशत्वे 25  
च का युक्तिः ?
3. “हितुतत्त्ववर्द्धित-सत्त्वासत्त्वकथा इषा” इति वन्योक्त्याने क उपपत्तिः ? 25  
किञ्चास्य व्याख्यानम् ?
4. अथक्षानप्रबन्धयोरेकस्य संस्कृतभाषया अनुवादः कायः— 25

A.

At the time when the different systems of Indian Philosophy became first known to the scholars of Europe everything that came from the East was looked upon as of extreme antiquity. There had been vague traditions of ancient Indian Philosophy even before the time of Aristotle. Alexander himself, we are told, was deeply impressed with that idea, as we may gather from his desire to communicate with the gymnosophists of India.



## B.

In this way the first book of the Nyāya-Sūtras gives us indeed a fair outline of the whole of Gotama's philosophy, while the following three books enter into a more minute examination of its details. Thus the second book treats more fully of the Pramāṇas, the third and fourth of the Prameyas, the fifth treats of all that comes under the head of paralogisms. Some of the questions discussed in these books show quite clearly that they must have formed the subject of lively and long-continued controversy, for though some of the objections raised may seem to us of little importance, they prove at all events the conscientiousness of the early Naiyāyikas.

## (GROUP F)

## SEVENTH PAPER

## FIRST HALF

*Examiner*—MM. S. KUPPUSWAMI SASTRI, M.A.

1. व्यायमते चत्वार्ष प्रमाणातीति मुक्तावलीमनुसृत्य सयुक्तिकं समर्थयत । 20

2. (a) निर्विकल्पकज्ञानं तस्य अतीन्द्रियतां च साधयत । 15

अथवा

(b) उपधिहेत्वाभासस्य स्वरूपं भेदान् दूषकताबीजं च निरूपयत ।

3. (a) सावतरणिकं व्याख्यात— 15

“..... अथाकाशशरीरिणाम् ।

अव्याप्यवृत्तिः क्षणिको विशेषगुण इष्यते ॥”

अथवा

(b) पाणिनीयकारकानुशासनप्रकरणे ‘अनभिहिते’ इत्यर्थे नैयायिकाभिमतं सयुक्तिकं निष्काश्य दर्शयत ।

## SECOND HALF

*Examiner*—PANDIT PANCHANAN TARKAVAGIS

1. कथा रीत्या मीमांसकसम्मत-शक्तिवादो दूषित उदयनेन ? 12½

2. उदयनस्य प्रकृतिकारणत्ववाद-त्वण्डनकोशलं, विशदीकृत्य प्रदर्शयताम् । 12½

अथवा

सौख्यदृष्ट्या न सन्देहो न प्रामाण्ये विरोधतः ।

एकता निर्णयो येन क्षणे तत्र स्थिरी मतः ॥

वर्तमानरीत्या व्याख्यातमियं कारिका ।

3. Translate into Sanskrit :—

25

Still less does the Nyāya accord with the purely idealist theory of Buddhism, which regards ideas as the sole reality, and finds that there is identity between cognizer, cognition, and its object : externality thus is due to an error which causes what is really part of an internal series of cognitions to be regarded as something external. The Nyāya naturally objects strongly to a theory which deprives the external world of all reality : they insist moreover, that if all is but idea, it would be impossible to have such judgments as ‘This is blue,’ since the judgment would necessarily take the form ‘I am blue,’ which is absurd.

(GROUP F)

EIGHTH PAPER

FIRST HALF

Examiner—MM. GURUCHARAN TARKA-DARSHANTIRTHA

[Full marks—75]

प्रथमं प्रश्नसूचीयां वशिष्ठानां वप्रश्नतरणीयम् ।

- |   |    |
|---|----|
| 1. प्रश्नपादमने हितपाकज्जपाद्युत्पत्तिविनाशप्रक्रिया कीदृशी ? | 24 |
| 2. सुखदुःखगार्हर्ष्याधर्मयोश्च परस्परभावरूपत्वे को दोषः ?     | 17 |
| 3. शक्तिकार्यपालस्यानां कस्य कस्मिन् पदार्थेऽन्तर्भावः ?      | 17 |
| 4. स्वप्नितोऽपमस्मनानां कानि लक्षणाणि ?                       | 17 |
| 5. अधस्तनसूत्राणां जयनारायणसम्भवा व्याख्या कीदृशी ?—          | 17 |

(क) सामयिकः शब्दार्थप्रत्ययः ।

(ख) तद्वचनादात्म्यस्य प्रामाण्यम् ।

(ग) कार्यविरोधि कर्म ।

(घ) न द्रव्याणां कर्म ।

(ङ) संयोगानां द्रव्यम् ।

SECOND HALF

Examiner—PANDIT VIDHUSEKHAR SASTRI

[Full marks—25]

Translate any one of the following passages :—

25

(a) सर्वेऽप्येते चत्वारो द्रवत्वं च पृथिव्यां क्वचिद् अवयवरूपादितः क्वचिच्च पाकादुत्पद्यन्ते । केचिदाश्रयभावात् केचित्पाकाद्भिन्नमस्यन्ति । न च पृथिवीपरमाणुगतानामेषामुत्पादविनाशयोर्मानाभाव इति वाच्यम् । नीलमधुरसुरभिकठिनादिवस्तूनां भस्मनि विपरीतरूपादय उपलभ्यन्ते । न च भस्मारम्भकपरमाणुषु तादृशरूपादिकमन्तरैश्च भस्मनि ते भवितुमर्हन्ति । कारणगुणानां कार्यगुणारम्भकत्वादिति भस्मारम्भकपरमाणुभिस्तादृशरूपादिमन्त्रिर्भवितव्यम् । त एव च परमाणवस्तादृशवस्तुनोऽप्यारम्भकाः । ते च यदि भस्मारम्भकालात् प्रागपि भस्मगतरूपादिजातीयरूपादिमन्त्रस्तदा तादृशैस्तेरारब्धे वस्तुष्वपि तादृशरूपादयो भवेयुः । इदानीं वा यदि ते नीलादिमन्त्रस्तदा तद्वत्त्वम्प तादृशरूपाद्युपलभ्यन्ति । अतस्तादृशवस्तुनोऽपि संयोगे सति तदारम्भकपरमाणुष्वपि तेजःसंयोगेन पूर्वरूपादिनाम्नेन तदा रूपान्तरोत्पादोऽङ्गीकर्तव्य इति सिद्धं नित्यपृथिवीगतानां तेषामनित्यत्वम् इत्येवादिक् ।

(b) अथ पाकाद्रूपाद्युत्पत्तिः क, ङ वावयवरूपादित इति चेत् । अथ सिद्धान्तानुयायिनः । सत्यवयवनि पाकेन रूपनाशो न सम्भवति । समवेतनाशं

प्रत्याश्रयनाशस्य हेतुतया विना कारणं कार्योत्पत्तेरसम्भवात् । अतः पाकीन द्वाणुकाद्य-  
न्यावयवविपर्यन्तमवयवनाशक्रमेण नश्यति । नष्टे च तस्मिन् केवलेषु प्ररमाणेषु पाकतः  
श्लामनाशरूपान्तरोत्पत्तौ सम्पद्येते । ततो द्वाणुकादक्रमेण कार्यद्रव्याण्युत्पद्यन्ते ।  
ततस्तेषु कारणगुणक्रमेण रूपान्तरोत्पादः । इत्थं च पाकात्परमाणावेव पूर्वरूपनाश-  
रूपान्तरोत्पादाविति । ईयायिकाः पुनरेवमुषवर्णयन्ति । पाकीन द्वाणुकाद्यन्तावयवविपर्यन्तं  
द्रव्यनाशद्रव्यान्तरोत्पादौ न युक्तौ । गौरवान्मानाभावाच्च । न चाश्रयनाशस्य समवेत-  
नाशहेतुतया विना पूर्वद्रव्यनाशं पूर्वरूपनाशो न सम्भवतीति वाच्यम् । विनाप्याश्रयनाशं  
परमाणुरूपादिनाशेनोक्तकार्यकारणभावाभावात् । अपि च पूर्वद्रव्यनाशाङ्गीकारे श्लाम-  
घटादौ कृतानां रेखोपरिखादीनां पाकानन्तरमनुपलम्भापत्तिः । न चावयविनावष्टब्ध-  
वयवेषु पाको न सम्भवतीति वाच्यम् । अवयविनः सच्छिद्रतया सत्येवावयविनि वङ्गेरन्तः-  
प्रवेशसम्भवात् ।

## (GROUP G)

## FIFTH PAPER

## FIRST HALF

Examiner—MM. GURUCHARAN TARKA-DARSHANTIRTHA

[Full marks—75]

पञ्चसु प्रश्नेषु त्रयाणामुत्तरं कार्यम् ।

1. विविधदुःखात्यन्तनिवृत्तिरत्यन्तपुरुषार्थ इति सूत्रे विविधपदस्यात्यन्तपदयोश्च किं 25  
प्रयोजनम् ?—के च तदर्थाः ?
2. ईश्वरासिद्धेरिति सूत्रस्य संप्रत्ययव्याख्या कीदृशी ? ईश्वराभावादित्यनुक्ता 25  
ईश्वरासिद्धेरिति कथमस्य किं प्रयोजनम् ?
3. प्रतिविषयाध्यवसायो दृष्टमिति ग्रन्थस्य कीदृशी व्याख्या ? तत्त्वकौमुदीकृतमिति 25  
पुरुषवङ्गत्वे च का युक्तिः ?
4. योगसूत्रोक्ताभिनिवेशः कीदृशः ? किंप्रमाणकश्च सः ? “तत्र निरतिशयं 25  
सार्धं प्रयोजनम्” इति सूत्रस्य भाष्यदृष्ट्योरिकतरसम्भवात् व्याख्या कीदृशी ?
5. अधस्तनसूत्राणां व्याख्याः कार्याः :— 25

(क) प्रत्ययस्य परचित्तज्ञानम् ।

(ख) अनुभूतविषयासंप्रमीषः व्युत्तिः ।

(ग) नावस्थातो दीदृधर्मात्वात् तस्याः ।

(घ) संज्ञातपराधर्मात् पुरुषस्य ।

(ङ) सनाधिसुवृत्तिमोक्षेषु ब्रह्मरूपता ।

## SECOND HALF

*Examiner—MR. MURALIDHAR BANERJEE, M.A.*

[Full marks—25]

Translate into English the following :—

25

(a) नन्वेकात्मकं ब्रह्म, यथा वृक्षोऽनेकशाखः एवमेकशक्तिप्रकृतियुक्तं ब्रह्म, अत एकत्वं नानात्वं चाभयमपि सत्यमेव, यथा वृक्ष इत्येकत्वं शाखा इति नानात्वम्, यथा च समुद्रात्मनैकत्वं फेनतरङ्गाद्यात्मना नानात्वम्, यथा च सदात्मना एकत्वं घटशरावाद्यात्मना नानात्वम्, तत्र एकत्वांशेन ज्ञानान्मोक्षव्यवहारः सिध्यति, नानात्वांशेन तु कर्मकाण्डाश्रयी लौकिक-वैदिकव्यवहारी सिध्यति इति, एवं च सदादिदृष्टान्ता अनुरूपा भविष्यन्तीति ।

नैवं स्यान्मृत्तिकेत्येव सत्यामिति प्रकृतिमात्रस्य दृष्टान्ते सत्यत्वावधारणात् वाच्यम्-शब्देन च विकारजातस्यानृतत्वाभिधानात्, दाष्टान्तिकेऽपि “एतदात्ममिदं सर्वम्” “तत्त्वमसि” इति च परमकारणस्यैकस्य सत्यत्वावधारणात्, “स आत्मा, तत्त्वमसि श्वेतकेतो” इति च शरीरस्य ब्रह्मभावोपदेशात् । व्ययम् प्रसिद्धं श्वेतच्छरीरस्य ब्रह्मात्मत्वमुपदिश्यते न यवान्तरप्रसाध्यम् अतश्चेदं शास्त्रीयं ब्रह्मात्मत्वं अभ्युपगम्यमानं स्वाभाविकस्य शरीरात्मत्वस्य बाधकं सम्पद्यते रज्ज्वादिवुद्ध्य इव सर्पादिबुद्धीनाम् ।

(b) दधिघटवृक्षकादादिभिः प्रतिनियतानि कारणानि क्षीरमृत्तिकासुवर्णादीनि उत्पादीयमानानि लोके दृश्यन्ते, न हि दध्यर्थिभिः मृत्तिकोपादीयते, न घटादर्थिभिः क्षीरम्, तदसत्कार्यवादे नोपपद्यते । अवशिष्टे हि प्रागुत्पन्नेः सर्वत्र सर्वस्यासत्त्वे कस्मात् क्षीरादेव दध्युत्पद्यते न मृत्तिकायाः, मृत्तिकाया एव च घट उत्पद्यते न क्षीरात् ? अथावशिष्टेऽपि प्रागसत्त्वे क्षीरे एव दध्नः कश्चिदतिशयो न मृत्तिकायाम्, मृत्तिकायामिव च घटस्य कश्चिदतिशयो न क्षीरे इत्युच्यते । तर्हि अतिशयवत्त्वात् प्रागवस्थायाः असत्कार्य-वादहानिः सत्कार्यवादसिद्धिश्च । शक्तिस्य कारणस्य कार्यनिर्गमार्था कस्यामाना नान्याऽसती वा कार्यं नियच्छेत् असत्त्वाविशेषादन्वत्विशेषाच्च । तस्मात् कारणस्य आत्मभूता शक्तिः शक्तेर्यात्मभूतं कार्यम् । अपि च कार्यकारणयोर्द्व्यंगुणादीनां चान्न-सङ्घवन्नेदुद्ग्राभावात् तादात्म्यमभ्युपगम्यम् ।

(GROUP G)

SIXTH PAPER

FIRST HALF

*Examiner—MM. SITARAM SASTRI*

[Full marks—75]

Answer any three questions from each of the groups (a) and (b)

(a) (i) “इन्द्रियार्थसन्निकर्षोत्पन्नं ज्ञानमन्यपदेश्यमन्यमिचारि व्यवसायात्मकं 12½ अक्षयम्” ।

प्रतिपदसार्थक-प्रदर्शनपुरस्कारं स्वमिदं व्याख्यायताम् । अनेन कस्य लक्षणमुच्यते ?  
स्वीपातं तन्निर्दोषं भवति न वा ? न चेददोषं तत्कीदृशम् ? सूत्रतय कथं तन्नामः ?

(ii) यथाभाष्यवृत्ति वैकाख्यासिद्ध्या प्रमाणाप्रामाण्यमाशङ्क्य सङ्केतकं 12½  
निरस्तताम् । वैकाख्यासिद्धिसम्भवस्यावश्यं इत्यनुरोधेन निरूप्यताम् ।

(iii) बुद्धेर्नित्यत्वानित्यत्वे परपक्षप्रदर्शनपुरस्कारं सप्रमाणं निर्णीयताम् । 12½

(iv) स्मृतद्वैतवो निरूप्यतां यथाभाष्यं नामतः स्वरूपतो दृष्टान्ततय । 12½

(v) अनुपलब्धिसमं जातिविशेषं लक्षयित्वा सोत्तर तद्वृष्टान्तस्थलं प्रदर्शयताम् । 12½

(vi) सूत्रसुल्लिख्य भाष्यवृत्त्यनुरोधेन निर्दोषं वादलक्षणं विस्पष्टं विलिख्यताम् । 12½

(b) (i) तमसः सप्तद्रव्यातिरिक्तत्वमाशङ्क्य सयुक्ति निराकृत्य मतमिदं-प्रदर्शन- 12½  
पुरःसरं तत्स्वरूपं निर्णीयताम् ।

(ii) आकाशसाधकानुमानाकारं संप्रदर्श्य यथाभाष्यं सङ्केतकमाकाशगुणा 12½  
निरूप्यताम् ।

(iii) नित्यपदार्थास्वीकार-वाचोयुक्तिं संप्रदर्श्य युक्त्या तन्निरासः क्रियताम् । 12½

(iv) बुद्धेरनुमेयत्वमतं सनामोल्लेखं सम्यक् प्रतिपाद्य युक्त्या तन्निरासः 12½  
प्रदर्शयताम् ।

(v) पाकजोत्पत्तिविधानं यथाभाष्यं सप्रक्रियं विलिख्यताम् । 12½

(vi) परत्वापरत्वयोर्नाशकान् नामत उल्लिख्य अपेक्षाबुद्धिविनाशस्य द्रव्यसंयोग- 12½  
विनाशस्य च तन्नाशकत्वं सप्रक्रियं संप्रदर्शयताम् ।

## SECOND HALF

Examiner—PANDIT GOPINATH KAVIRAJ

[Full marks—25]

1. Translate into Sanskrit any two of the following extracts :—

(a) Buddhism distinguished itself from most other systems by 12½  
applying the doctrine of causality and non-substantiality to the mind as well as to the body. This is a very important point, inasmuch as it is a doctrine which distinguishes Buddhism from practically every other religion. In most other systems of thought, though the causal relationship is in some way recognised, the higher powers, especially the Supreme Being, are considered superior to this law, and are able, as shown by their miracles, temporarily to abrogate it. Buddhism, though accepting the possibility of miracles, seeks to correlate them with causality.

(b) Self-awareness is the outcome of thought and feeling, and its 12½  
extent depends on the idea one has of one's personality, and on the degree of warmth put into it. This idea of one's personality in one's consciousness, is the objectification of one's self, though it constantly changes in the course of evolution, and will continue changing till perfection is achieved, and God-consciousness attained. It is the form of God-consciousness which permanently resides at the place called the *Siddha Sila*, the Abode of Perfection.

(c) Do not live in the future nor in the dead things of yesterday, 12½  
but live rather in the immediate now, with the understanding that you are a product of the past, and that by your actions of to-day you can control tomorrow and so become the master of time, the master of evolution, and

hence the master of perfection. Then you will live with greater intensity, then every second will count and every moment will be of value. Put aside the past with all its glories, beautiful and terrible, all its traditions, wide and yet so conditioned, all its moralities that strangle life, and look into your own heart and mind to discover what lies before you in the future.

## (GROUP G)

## SEVENTH PAPER

## FIRST HALF

*Examiner*—MM. KUPPUSWAMI SASTRI, M.A.

[Full marks—50]

1. In an essay, maintain *any one* of the following theses, referring to 20 relevant portions of the *Gītā* :—

(1) “आत्मज्ञानवतः संन्यास एवाधिकारो न कर्मणि ।”

(2) The greatest achievement of the *Gītā* consists in its all-embracing eclectic synthesis.

(3) Advaita, in theory and practice, is the central theme of the *Gītā*.

2. (a) Make clear the meaning of the following extracts according 15 to Sankara, drawing attention to the defects and merits in such other interpretations as may be known to you :—

(1) कर्मण्यकर्म यः पश्येदकर्मणि च कर्म यः ।

स बुद्धिमान्मनुष्येषु स युक्तः कृत्स्नकर्मकृत् ॥

(2) श्रेयो हि ज्ञानमभ्यासाज्ज्ञानाद्भ्रामं विप्रिच्यते ।

ध्यानात्कर्मफलत्यागश्चाभावाच्चान्तरङ्गमनसम् ॥

Or,

(b) Refute, according to Sankara, the following objection :—

“ननु सर्वज्ञेनेत्येक एव ईश्वरः, नाव्यवहारीतिरिक्तो भोक्ता विद्यते चेत्, बन्धनोच-  
तइ तुशास्त्रानर्थक्यप्रसङ्गः, प्रत्यक्षप्रमाणविरोधश्च ।”

3. (a) Elucidate, according to the Vedāntasāra, the meaning of the 15 text “तत्त्वमसि”.

Or,

(b) Make clear the nature and function of चक्षुष्याकारहर्तृ in the Advaitic scheme of self-realisation. In this connection, point out how the conflicting texts “ननु सैवानुद्भूतव्यम्” and “दृश्यमसा न भवति” may be reconciled.

## SECOND HALF

*Examiner*—MR. KOKILESWAR BHATTACHARYYA, M.A.

[Full marks—50]

1. State and explain what you know of the following :— 10

(a) The theory of अध्यास and अपवाद from the Vedāntic standpoint.

(b) The theory of final emancipation (मुक्ति) as propounded in the Sāṅkara-school and its distinction from the Sāṅkhya idea of मुक्ति.

Or.

What is the conception of the Vedāntic Prāṇa and its two-fold manifestation? The Prāṇa is often identified with the Ajñāna or Avidyā; does this identification prove its exclusively subjective character?

2. Elaborate the idea contained in any two of the following extracts :— 15

(a) न च अविद्यावत्त्वे तदपगमे च वस्तुनः कश्चिद् विशेषोऽस्ति । न तु अहितुङ्गिकाले तदपगमकाले च वस्तुनः कश्चिद् विशेषः स्यात् ।

(b) एकत्वोऽपि स्वरूप-बाह्यरूपापेक्षया अनेकशब्दप्रत्ययदर्शनात्.....यथा एकापि सती देवा स्थानान्यत्वेन निविशन्नाना एकदशशतसहस्रदिशब्दप्रत्ययभेदमनुभवति ।

(c) रुद्धोऽलम्बनियमोऽपि प्रत्ययविषययोरूपायोपेयभावहेतुको नामेदहेतुकः इत्यभ्युपगन्तव्यम् ।

3. Translate the following extract into simple Sanskrit :— 25

We reply that the nature of the soul cannot be attributed to momentarily fleeting ideation, inasmuch as cognition, desire, volition, retention, and reminiscence must be assigned to one substratum or repository, and inasmuch as these states being successive, they cannot have a fluxional ideation for their substratum. But had not cognition and the rest a single substratum, it would follow that in regard to an object experienced there could be no activity, such activity being determined by all inference as to its utility as a means to a desired end, and this inference again being based on the homogeneity of the present to past objects as its middle term. For, what one being experiences, another cannot remember. For this and many other reasons the view that the soul is a momentarily fleeting ideation cannot be accepted.

(GROUP G)

EIGHTH PAPER

FIRST HALF

*Examiner*—MM. ANANTA KRISHNA SASTRI

[Full marks—75]

1. अध्यायनस्याध्यापनविधिप्रयुक्तत्वं प्राप्तावस्थ परतो वास्तवं च कथं न युज्यते? 15
2. ब्रह्मावकाशिकरसमुदाहरणस्य परीक्ष्यपूर्वकं संश्लेषताम् । 15

3. नामधेयानां कतिभिर्निमित्तैः सिद्धिः ? कानि तानि ? “वैश्वदेवेन यजेत” 15  
इत्यत्र व्यायप्रकाशरीत्या कथं नामत्वव्यवस्था ?
4. अधोलिखितानि वाक्यानि यथाभार्य व्याख्यायन्ताम् :— 15
- (1) अविज्ञातं विज्ञानतां विज्ञातमविज्ञानताम् ।
- (2) ऋतं पिबन्ती सुकृतस्य लोके  
गृहां प्रविष्टौ परमे परार्हे ।  
ह्यायातपी ब्रह्मविदो वदन्ति  
पश्चादग्रयो ये च त्रिणाचिकेताः ॥
- (3) यस्मिन् द्यौः पृथिवौ चान्तरिक्षमोतं मनः सहप्राणैश्च सः । तमेवैकं  
जानथ आत्मानमन्या वाचो विमुञ्चत ।
- (4) हासुपर्णा सयुजा सखाया समानं वृक्षं परिवस्त्रजायि ।  
तयोरन्यः पिप्पलं स्वाद्वत्थनमन्नम्योऽभिचाकशीति ।
- (5) यः पुनरेतं त्रिमात्रेणोमित्येतैर्नैवाचरेण परं पुरुषमभिध्यायत ।
5. माण्डूक्योपनिषत्प्रतिपाद्यमर्थं संगृह्य प्रतिपादयत । 15

## SECOND HALF

Examiner—MR. BANAMALI VEDANTATIRTHA

[Full marks—25]

Translate any one of the following passages into English :—

25

- (a) कर्त्तास्ति कश्चिज्जगतः स चकः  
स सर्वगः स स्ववशः स नित्यः ।  
इमाः कुट्टेवाकविडम्बनाः स्यु-  
क्तेषां न येवामनुशासकस्त्वम् ॥

कुत्तखिता कुट्टेवाका आयडविशेषाः कुट्टेवाकाः कदायहा इत्यर्थः । यत् तावदुक्तं  
परैः—“सर्वोपवैततर्वादिकं सर्वं बुद्धिमत्कर्तृकं कार्यत्वात् । यद् यत् कार्यं तत् सर्वं  
बुद्धिमत्कर्तृकं यथा घटः । तथा चेद् तस्मात्तथा । व्यतिरिक्ते व्योमादि” इति ।  
तदुक्तम् व्याप्तेरप्युच्यते । साधनं हि सर्वत्र व्याप्ती प्रमाणेन सिद्धायां साध्यं मनश्चेदिति  
सर्ववादिसंवादः । स चायं जगन्ति सजन् सशरीराऽशरीरो वा स्वात्, सशरीरोऽपि  
किमप्यदादिषत् इत्यशरीरविशेषः सत पिशाचादिषत् अहमशरीरविशेषः ? प्रथमपक्षे  
प्रत्यक्षवाचकमन्तरेणापि च जायमाने त्वत्तत्तत्पुरन्दरधनुर्भादौ कार्यत्वस्य दर्शनात्  
प्रमेयत्वादिवत् साधारणानैकान्तिको हेतुः ।

ईश्वर एकः । ब्रह्मणो हि विश्वविधादन्वस्त्रोकारि परस्परविमति-संभावनाया  
अनिवार्यत्वात् । इदमपि न युक्तम् । अनेककौटिकावतनिपायत्वेऽपि शक्तसूक्तोऽनेक-



शिल्पिकल्पितत्वेऽपि प्रासादादीनां नैकसरवागिर्वर्षितत्वेऽपि मधुच्छवादीनां चैकरूपताया उपपत्त्यात् । अथैतेषु एक एव ईश्वरः कर्त्ता इति ब्रूवे । एवं चेद् भवती भवामीपतिं प्रति वासना तर्हि कुविन्दकुम्भकारादितिरस्कारेण घटपटादीनामपि कर्त्ता स एव किं न कल्पते । अथ तेषां प्रत्यक्षसिद्धं कर्त्तृत्वं कथमपङ्ग शक्यम्, तर्हि कौटकादिभिः किं तव विराजम्, यत् तेषामसदृशतादृशप्रयाससाध्यं कर्त्तृत्वमिहैल्लयेवापलभ्यते तस्माद् वैमल्यभयात् महेशितुरेकत्वकल्पना भोजनादिव्ययभयात् कृपणस्य अलम्बवत्प्रभुपुत्र-कलत्रादिपरित्यजनेन शूयारस्थानीसेवनमिव ।

(b) तस्य सर्वज्ञत्वमपि असंजसम् । ननु तस्य सार्वज्ञं केन प्रमाणेन गृहीतम् । न तावत् प्रत्यक्षेण तस्य इन्द्रियार्थसंनिर्घोषोत्पन्नतया अतीन्द्रियगृह्या-सामर्थ्यात् नापि अनुमानेन तस्य लिंगगृह्य-लिङ्गलिङ्गिसम्बन्धस्वरूपपूर्वकत्वात् । न च तस्य सर्वज्ञत्वेऽनुमेये किञ्चिदव्यभिचारिलिङ्गम् पश्यामः तस्य अत्यन्तविप्रकृष्टत्वेन तत् प्रतिबद्धलिंगसंबन्धगृह्याभावात् । अथ तस्य सर्वज्ञत्वं विना जगद्वैचित्र्यमनुपपद्यमानं सर्वज्ञत्वमर्थादपामयति इति चेत्, न । अविनाभावाभावात् । न हि जगद्वैचित्र्यं तत् सार्वज्ञं विनान्यथा नोपपन्ना । द्विविधं हि जगत् स्थावर-जङ्गममेदात् । तत्र जंगमानां वैचित्र्यं स्लोपात्तयमाशुभकर्मपरिपाकवशेनैव, स्थावराणां तु सचेतनानामियमेव गतिः अचेतनानां तु तदुपभोगयोग्यतासाधनत्वेन अनादिकालसिद्धमेव वैचित्र्यम् इति । नापि आगमसात्-साधकः । स हि तत्कृतोऽन्यकृतो वा स्यात् । तत्कृत एव चेत् तस्य सर्वज्ञतां साधयति, तदा तस्य महत्त्ववृत्तिः स्वयमेव रूगुणोत्कीर्णः महतामनधिकार-त्वात् । अन्यच्च तस्य शास्त्रकर्त्तृत्वमेव न युज्यते । शास्त्रं हि वर्णात्मकम् । ते च तालादिब्यापारज्याः स च शरीर एव संभवी । ईश्वरश्च न शरीरी ।

किं च प्रेक्षावतां प्रवृत्तिः स्वार्थकरुणाभ्यां व्याप्ता । ततश्चायं जगत्सग व्याप्रियते स्वार्थात् कारुण्याद् वा । न तावत् स्वार्थात् तस्य कृतकत्वात् । न च कारुण्यात् । परदुःखप्रज्ञायेच्छा हि कारुण्यम् । ततः प्राक् सर्गात् जीवानामिन्द्रिय-शरीरविषयानुत्पत्तौ दुःखाभावेन कस्य प्रज्ञायेच्छा कारुण्यम् ।

(GROUP H)

FIFTH PAPER

FIRST HALF

Examiner—PANDIT HARGOVIND DAS SETH

[Full marks—75]

1. भवस्तनयोः प्रबन्धयोरन्यतरस्य संस्कृतच्छायां कुरु ; यानि 25  
चान्दार्भप्राकृतभाषागतवैशिष्ट्ययुक्तानि पदानि, महाराष्ट्रीप्राकृते तानि  
कीदृशानि भवन्तीति प्रदर्शय :—

(a) तप् णं गंगदत्ता भारिया जायणिहुया यावि होत्था ; जाया  
जाया दारया विणिषायमावज्जंति । तप् णं तीसे गंगदत्ताप् सस्यवाहीप्

अक्षया कयाह पुष्करत्तावरत्तकालसमयसि कुडुं बजागरियं जागरमाणीए अर्थ  
अज्झस्थिए संकप्पे समुप्पण्णे—एवं खलु अहं सागरदत्तेणं सत्थवाहेणं सद्धिं  
बहुइं वासाइं उरालाइं मनुस्सगाइं भोगभोगाइं भुंजमाणी विहरामि ;  
णो चेव णं अहं दारगं वा दारियं वा पयामि । तं घण्णाओ णं ताओ  
अम्मयाओ सपुत्ताओ कयत्थाओ कयलक्खणाओ ; सुलद्धे णं तासिं अम्मयाणं  
माणुस्सए जम्मजीवियफले, जासिं मच्चे नियगकुच्छिसंभूयाइं थणहुद्धलुद्ध-  
गाइं महुरसमुल्लावगाइं मम्मणपयंपयाइं थणमूलकाकक्खदेसभागं अति-  
सरमाणगाइं मुद्धगाइं । पुणो य कोमलकमलोवमेहि य हत्थेहिं  
गिण्हेऊण उच्छेगं निवेसियाइं दिंति समुल्लावए सुमहुरे पुणोपुणो मंजुलप्प-  
भणिते । अहं णं अधण्णा अकयपुण्णा, एत्तो एगमवि न पत्ता ।

(७) तए णं से णंदिसेणे कुमारे रज्जे य जाव अंतेउरे य मुच्छित्ते  
इच्छति सिरिदामं रायं जिवियातो ववरोवित्तए ; सयमेव रज्जसिरिं कारेमाणे  
पालेमाणे विहरित्तए । तए णं से णंदिसेणे कुमारे सिरिदामस्स रत्तो बहुणि  
अंतराणि य छिहाणि य विवराणि य पडिजागरमाणे विहरति । तते णं से  
णंदिसेणे कुमारे सिरिदामस्स रत्तो अंतरं अलभमाणे अक्षया कयाइं चित्तं  
अलंकारियं सहावेति, सहावेत्ता एवं वयासी—तुम्हे णं देवाणुप्पिया सिरि-  
दामस्स रत्तो सव्वठाणेसु य सव्वभूमोसु य अंतेउरे य दिण्णवियारे सिरिदा-  
मस्स रत्तो अभिक्खणं अभिक्खणं अलंकारियं कम्मं करेमाणे विहरसि ।  
तण्णं तुमं देवाणुप्पिया सिरिदामस्स रत्तो अलंकारियं कम्मं करेमाणे गीवाए  
खुरं निवेसेहि ; तो णं अहं तुम्हं अद्धरज्जयं करेस्सामि ; तुम्हं अग्गेहिं सद्धिं  
उरालाइं भोगभोगाइं भुंजमाणे विहरिस्ससि । तते णं से चित्ते  
अलंकारिए णंदिसेणस्स कुमारस्स वयणं एयमट्ठं पडिसुणेति ।

२. निम्नोद्धृतयोः प्रबन्धयोरेकतरस्य विशदतया व्याख्यां विधेहि :— 25

(a) परिगहस्सेव य अट्ठाए करेति पाणाण वहकरणं अलिय-  
नियडिसाहसंपओगे परदव्वअभिज्जा सपरदारअभिगमणासेवणाए आयास-  
विसूरणं कल्लहंढवेराणि य अवमाणणविमाणणाओ इच्छामलिच्छप्पिवास-  
सतवतिसिया । तण्हगेहिलोभत्था अत्ताणा अणिग्गहिया करेति कोहमान-  
मायालोभे अकित्तणिज्जे । परिग्गहे चेव होंति नियमा सज्जा दंडा य गारवा  
य सकाया सक्का य कामगुणअण्हगा य इंदियलेसाओ । सयणसंपओगा  
सच्चित्ताचित्तमीसगाइं दव्वाइं अणंतकाइं इच्छंति परिचेत्तुं । सदेवमणुया-  
सुरम्मि छोए छोअपरिग्गहों जिणवरेहिं भणिओ नत्थि एरिसो पासो पडिबंओ

अथि सव्वजीवाणं सव्वलोए । परलोगमि य नट्ठा तमं पविट्ठा महया-  
मोहमोहियमती तिमिसंभकारे तसथावरसुहुमबादरेसु पज्जत्तमपज्जत्तगा एवं  
जाव परियट्ठंति दीहमद्धं जोवा लोभवससंनिविट्ठा ।

(b) अह केरिसए पुणाइं आराहए वयमिणं १ जे से उवहिभत्तपाण-  
संगहणदाणकुसले अच्चं तबालदुब्बलगिलाणवुद्धस्वमके पवत्तिआयरियउ-  
वज्जाए सेहे साहम्मिए तवस्सिकुलगगसंघचेइयट्ठे य निज्जरट्ठी वेयावच्चं  
अणिस्सियं दसविहं बहुविहं करेति । न य अचियत्तस्स गिहं पविसइ ।  
न य अचियत्तस्स भत्तपाणं गेहइ । न य अचियत्तस्स सेवइ पीढफलग-  
सेज्जासंथारगवत्थपायकंबळडंडगरयहरणनिसेज्जचोलपट्टयमुहपोत्तियपायपुंछणा-  
इभायणभंडोवहिउवगरणं । न य परिवायं परस्स जंपत्ति । न  
यावि दोसे परस्स गेहइ । परववएसेगवि न किंचि गेहइ । न य  
विपरिणामेइ किंचि जणं । न यावि णासेइ दिव्वसुकयं । दाज्ज य न  
होइ पच्छाताविए । संभागसीले संगहोवग्गहकुसले । से तारिसए आराहए  
वयमिणं ।

3. शब्दानामेतेषां संस्कृतप्रतिशब्दनिर्देशपूर्वकं पारिभाषिकमर्थं 25  
लिखतः—

इसिवाइय, उत्तरकुरु, सयंभूरमग, पळिओवम, चउत्थभत्तिय, मण-  
पज्जवनाणी, रुयगवर, वज्जरिसहनाराय ।

## SECOND HALF

Examiner—DR. BENIMADHAB BARUA, M.A., D.LIT.

[Full marks—25]

1. Translate into Sanskrit or Prakrit any two of the following 25  
passages :—

(a) Great men are few in any case, and we are so much too apt  
to look for them in the wrong place that we are in danger of missing some  
of those that do exist. Now not only did I find a great man, but I  
discovered a great secret too. I discovered how to spend a holiday.

(b) Do not imagine that this question is in the Three Vedas.  
You imagine that you know all that I know, and so you act like the jujube  
tree. You don't know that I know a great deal which is unknown to  
you. Leave me now; I give you seven days—think over this question for  
so long.

(c) Where women rule, the seeing lose their sight,  
The strong go weak, the mighty have no might.  
Where women rule, virtue and wisdom fly :  
Reckless the prisoners in durance lie.  
As fire burns fuel, for each careless wight  
They burn fame, glory, learning, wit and might.

(GROUP H)

SIXTH PAPER

FIRST HALF

Examiner—PANDIT LAKSHMINARAYAN SASTRI

[Full marks—75]

1. राजा । त्वत्सुनीतिपादपस्य पुष्पमुन्निग्रम् ।

8

विदूषकः । फलं वि अद्वरेण दक्खिस्ससि ।

(Mālavikāgnimitram)

It appears that the Vilushaka of *Mālavikāgnimitram* is a clever man while that of *Abhijnānasakuntalam* is a fool. Compare the two and support your answer with quotations from their speeches.

Or,

Write in Prākṛit, Bhanumatī's सि विषयचंद्रसुखं as in *Venīśomhāra*.

Or,

Give in Prākṛit the मुरङ्गमन्युः in *Karpuramanjari*.

2. Translate any six of the following extracts into Sanskrit :—

15

(a) एगं लज्जावगदमुहिं परिस्सज्जिअ सअं तादकस्सवेण एव्वं

अहिणन्दिदं दिट्ठिआ धूमाउलिददिट्ठिगो वि जजमाणस्स पावए एव्वं  
आहुइ पडिदा । वच्छे सुप्पिस्परिदिग्गा विअ विज्जा असोअणिज्जा  
संवुत्ता । अज्ज एव्व इप्पिपडिरिस्सिदं तुमं भत्तुणो सआसं विसज्जेमि ।

(b) दिट्ठिआ चिरस्स कालस्स उव्वसीसहाओ णन्दनवणप्पमुहेसु  
देवदारणेषु विहरिअ पडिगित्तो पिअवअस्सो । दाणिं ससक्कारोवआरेहिं  
पकिदीहिं अगुरज्जन्तो रज्जं करेदि । असंताणत्तणं वज्जिअ ण किंवि से  
हीणं । अज्ज तिहित्रिसेसोत्ति भअवदीगं गङ्गाजज्जाण, सक्कमे देवीहिं  
सह किदाहिसेओ संपदं उवआरिअं पविट्ठो ।

(c) गोदमचापलादो दोलापरिभट्ठाए सरुज्जो मह चलणो । तुमं  
दाव गडुअ तवगीआसोअस्स दोहलं गिवट्ठेहि । अदि सो पञ्जरत्तवभन्तरे  
कुसुमं दंसेदि तदो अहं अहिक्कासपूरइत्तअं पसादं दाइस्सं । जाव  
णिओअभूमिं पुडमं गदा होमि ताव अणुपदं मम चलणाळङ्कारहत्थाए  
वड्ढावलिआए आअन्तव्वं ।

(d) कहं अविरएत्रिलोकपुण्णन्तविज्जुल्लुदाविकासमण्डिदेहिं मत्तमोर-  
कण्ठसामलेहिं ओत्थरीअदि णमोक्कणं जलहरेहिं । जाथ को दाणिं एसो  
संभमुक्खित्तकरवभमिदोत्तरिआक्कळो दूरदो जेव्व महुसिगिद्धवअगपडिसिद्ध-  
जुद्धव्यावारो एदाणं कुमाराणां अन्दरे शिमाणवरं ओदरावेदि ।.....

(e) उद्वासमसिमज्जुगिउल्लम्बचुम्बिअपउत्तणिस्सन्दचन्दमणिहारधारिणी  
पउरकप्पूरमविसेससिसिरचन्दगरसच्छडासारणिअरदन्तुरिदवालकदलीपत्तसअणा  
पादसंवाहणादिवावारतुवरन्तसहअरीसत्थविरइदोवणीदकमलिणीदलजल्लहताल्ल-  
उन्ता उस्मिहा एव्व रअणीओ गमेइ ।

(f) विच्छिण्णविसंतुलसिङ्खलाकलावअं उव्वहन्तं दन्तन्तरपरि-  
ग्गहिदं परिव्वाजअं उव्वहन्तं तं पेक्खिअ कण्णऊरएण मए णहि णहि  
अज्जआए अण्णपिण्डउट्टेण दासेण वामचरणेण जुदलेखअं उग्गुसिअ  
तुरिदं आपगादो लोइदण्डं गेगिहअ आआरिदो सो दुट्ठहत्थी ।

(g) सावगा किं अणेग असुगिदव्वेग सुदेन । ...ण रहस्सं किंहु  
अदिणि संसं । सावगा ण रहस्सं एदं तहपि ण कहिस्सं । ... का गइ ।  
सुणावु सावगो । अत्थि दाव अहं मन्दभग्गो पुढमं पाडलिउत्ते अहिणिव-  
समाणो लक्खसेण मित्तत्तणं उवगदे । तहिं अवसले लक्खसेण गूढं  
विसकण्णआपओअं उप्पादिअ घादिदे पव्वदीसले ।

(h) ही ही भोः । कोसम्भोरज्जलाहेगावि ण तादिसो पिअवअस्सस्स  
परितोसो आसी जादिसो मम मआपादो पिअवअगं सुगिअ हुविस्सदि  
त्ति तक्केमि । ता गडुअ पिअवअस्सस्स गिवेदइस्सं । कधम् । एसो  
पिअवअस्सो जधा इमं जेव्व दिमं अवलोअन्तो चिट्ठदि तह तक्केमि  
मं जेव्व परिवालेदि । ता जाव णं उवम्पप्पामि ।

(i) कीए वि संघडइ कस्स वि पेम्मगण्ठी

एमेव्व तत्थ ण हु कारणमत्थि रूअं ।

चङ्गत्तणं उण महिज्जदि जं तहिं पि

ता दिज्जए पिसुणलोहमुहेसु मुहा ॥

(j) हदमाणुशमंशभालए कुम्भशहइशवशाहिं शस्त्रिण ।

अणिशं अ पिवामि शोगिअं वलिशशदं शमले हुवीअडु ॥...

अह कहिं क्खु गदे मे लुहिलप्पिण्ण हुवीअदि । होडु । शहावइइशं  
दाव । अले लुहिलप्पिआ इदो एहि ।

3. Give English renderings of the following extracts, adding notes where necessary and referring to the dramas from which they are quote! :-

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(a) तस्स क्खु एदं निव्वमच्छिअ विउरवअणवीअस्स अवधीरिद-  
पिदामहहिदोवदेसङ्खरस्स सउणिप्पोच्छाहणादिविरुद्धमूलस्स जडुगेइजुदविस-

साहिणो संभूदचिरआलसंवद्धवेरालवालस्स पञ्चालीकेसगगहणकुसुमस्स फलं  
परिणमदि ।

(b) जघा जघा वइयदि अब्भखण्ढे  
तघा तघा तिम्मदि पुट्ठिचम्मे ।  
जघा जघा लग्गदि शीदवादे  
तघा तघा वेवदि मे हलक्के ॥  
वंशं वाए शत्तच्छिद्दं शुशहं  
वीणं वाए शत्ततन्तिं णदन्तिं ।  
गीअं गाए गहहइशाणुनूअं  
के मे गाणे तुम्बुनू णालदे वा ॥

(c) इी हीणामहे बुद्धिजलनिब्भरेहिं  
सिञ्चन्ती देसकालकलसेहिं ।  
दंसिस्सदि कज्जफलं गुरुअं चाणक्कणीतिलदा ॥

(d) हा सोम्म अज्जउत्त कहिं मि । ( सहसोत्थाय ) हद्दी हद्दी  
दुस्सिविणेण विप्पलद्धा अहं अज्जउत्तसुण्णं विअ अत्ताणं पेक्खामि । ( विलोक्य )  
हद्दी हद्दी एआहिणिं मं पसुत्तं उन्निअ गदो अज्जउत्तो । किं दाणिं एदं ।  
होइ से कुपिस्सं जइ तं पेक्खन्ती अत्तगो पहविस्सं । को एत्थ परिअणो ।

4. (i) Refer to the context and clearly explain in simple Sanskrit :— 12

(a) एसो पिअवअस्सो हंसो विअ विमुक्कमानसो करी विअ मअक्खामो  
मुणालदण्ढो विअ घनघम्ममिलाणो दिगदीओ विअ विअलिअच्छाओ पभाद-  
पुण्णिमाचन्दो विअ पण्डुरपरिक्खीणो चिट्ठदि ।

(b) अम्बरमहासरेक्कसहस्सपत्त पुब्बदिसावहूमुहुमण्डलकुङ्कुम-  
विलेसअ सअलभुवणाङ्गणदीवअ एत्थ सिविगअदंसने जं किं वि अच्चाहिदं तं  
अभवदो पणामेण कुसलपरिणामी ससदव्भादुअस्स अज्जउत्तस्स होइ ।

(c) तुज्झ ण आणे हिअअं मम उण कामो दिवा वि रत्तिस्सि ।  
णिग्घिण तवइ वलीअं भुइ वुत्तमणोरहाइ अण्णाइ ॥

(d) सामिअ संभाविआ जइ अहं तुए अमुणिआ ।  
तह अणुरत्तस्स जइ णाम तुह उवरि ॥  
णं मे छुलिअपारिजाअसअगिज्जअम्मि होन्ति ।  
णन्दनवणवादावि अच्चुण्हआ सरीरए ॥

- (ii) Explain the historical allusion in extract (g) in Question 2. 4  
What is mentioned in the extract as पञ्चदोसले ?
5. (a) Indicate the peculiar characteristics of the Prākṛit dialects 6  
in which extracts (a), (f), and (j) in Question 2 are composed.
- (b) Comment (according to Prākṛit grammar) on the words under- 6  
lined in the extracts in Questions 2 and 4.
6. Name and explain the figures of speech in extracts (a) of Question 2. 8  
[दिष्टिषा धूसाउत्तिर्दिष्टिषो वि], (i) of Question 2, (a) of Question 3, and (a)  
of Question 4.

## SECOND HALF

*Examiner*—MR. KSHITISCHANDRA CHATTERJEE, M.A.

[Full marks—25]

Translate any one of the following passages into Sauraseni 25  
Prākṛit :—

(a) अस्ति विदर्भो नाम जनपदः । तस्मिन् भोजवंशभूषणमंशावतार  
इव धर्मस्य, रञ्जितभृत्यः कीर्त्तिमान्, शास्त्रप्रमाणकः पुण्यवर्मा नाम नरपति-  
रासीत् । स सर्वगुणैः समृद्धोऽपि देवाहण्डनीत्यां नात्यादृतोऽभूत् । तमेकदा  
रहसि वसुरक्षितो नाम मन्त्रिवृद्धः पितुरस्य बहुमतः प्रगल्भवागभाषत । तात  
सर्वैवात्मसम्पदभिजनात् प्रभृत्यन्यूनैवात्मभवति दृश्यते । बुद्धिश्च ते  
निसर्गपटुवी कलासु नृत्यगीतादिषु चित्तेषु च काव्यविस्तरेषु प्रासविस्तारा  
तवेतरेभ्यः प्रतिविशिष्यते । तथाप्यादावप्रतिपद्यात्मसंस्कारमर्थशास्त्रेषु,  
अननिसंशोधितेव हेमजातिर्नातिभाति बुद्धिः । बुद्धिहीनो हि भूभृदयुच्छित्तो-  
ऽपि परैरध्याह्नमाणमात्मानं न चेतयते । अयथावृत्ता च कर्मसु प्रतिहन्य-  
मानः स्वैः परैश्च परिभूयते । न चावज्ञातस्याज्ञा प्रभवति प्रजानां योगक्षेमारा-  
धनाय । आगमदीपदष्टेन खल्वध्वना सुखेन वसन्ते लोकयात्रा ।

(b) श्रुत्वा च तां तापसीगिरम् अहमपि प्रबुद्धबाण्यो निगूढमभ्यधाम्,  
यद्येवमन्व समाश्रयिहि । नन्वस्ति कश्चिन्मुनिस्त्वया तदवस्थया पुक्ताभ्युप-  
पादनार्थं याचितः, तेन स लब्धो वर्धितश्च । वार्त्ता चेयमतिमहती,  
किमनया, सोऽहमस्मि । शक्यश्च मयासौ विकटवर्मा व्यापादयितुम् ।  
अनुज्ञाः पुनरतिबहवः, तैरपि घटन्ते पौरजानपदाः । मान्तु न कश्चिदिह  
ईदृक्या जनो जानाति । पितरावपि तावदित्थं न संविदाते किमुतेतरे ।  
तदेनमर्थमुपायेन साधयिष्यामीत्यगादिषम् । सा तु वृद्धा सरदितं परिप्लव्य  
मुहुः शिरस्युपाग्राय प्रस्तुतस्तनी सगद्गदमगदत्, वत्स खिरं जीव, भद्रं तव ।  
प्रसन्नोऽयं भगवान् विधिः । अद्यैव ग्रहारवमंन्यधि विदेहा जाताः, यतः

प्रलम्बमानपीनबाहुर्भवानपारमेतच्छोकसागरमद्योत्सारयितुं स्थितः । अहो  
महद्भागधेयं देव्याः प्रियंवदाया इति हर्षनिर्भरा स्नानभोजनादिना  
मामुपाचरत् । अशिथ्रियश्चास्मिन् मठैकदेशे निशि कष्टशय्याम्, अचिन्तयञ्च  
विनोपधिनायमर्थो न साध्यः, स्त्रियश्चोपधीनामुन्नवभोगम् । अतोऽन्तः  
पुरवृत्तान्तमस्या अवगम्य तद्वारेण किञ्चिज्जालमाचरेयम् इति ।

(GROUP H)

SEVENTH PAPER

FIRST HALF

Examiner—PANDIT HARGOVIND DAS-SETH

[Full marks—75]

1. निम्नोद्धृतेषु यत्किमपि पद्यत्वं छन्दोनामलक्षणनिर्देशपूर्वकं 25  
व्याख्याहि :—

- (a) गयसज्जससस मयरद्वयसस कुसुमज्जओवदुइअस्स ।  
कंकेल्लिपल्लवमिसा आसि पयावो समिज्जंतो ॥
- (b) वंदे भंडीरस्सवि चिरस्स फुल्लमि जम्मि अलिओली ।  
नीलमणीण त इअरा वणसिरिपिट्ठीइ कवरिण्व ॥
- (c) भमरालिद्धे झसचिन्धयचिन्हे आसि सिंदुवारमि ।  
भस्सियझसिंधजीवाउभप्पच्चुअं किर पराओ ॥
- (d) सोहेइ सुहावेइ य उवहुअंतो लवोवि लच्छीए ।  
देवी सरस्सई उण असमग्गा किंपि विणडेइ ॥
- (e) नियआए चिय वायाए अत्तणो गारवं निवेसंता ।  
जे एंति पसंसं चिय जयंति इह ते महाकण्णो ॥
- (f) ताव अ दरदल्लिउप्पलपलोद्धुल्लिमइलंतकल्लहंसकुलो ।  
जाओ दरसंमिल्लिअहरिआअंतकुमुआअरो पच्चूसो ॥

2. निम्नलिखितानां पद्यानां प्राकृतप्रभेद (dialect) निर्देशपूर्वकं 25  
संस्कृतच्छायां विधेहि ; प्रत्येकं चैवं महाराष्ट्रीप्राकृते परिवर्तय : —

- (a) करियावणिउद्धारं गुरुभावं गदुय कदुय बलिवंधं ।  
गच्छिय लच्छिमुबिंदोभोदि भवं भोडु इंदसमो ॥



- (b) पम्मान राचिआ गुननिधिना रम्मा अनम्मपुम्मेन ।  
चिंतेतब्बं मतनातिवेरिनो किल विजेतब्बा ॥
- (c) चित्तु करेवि अणाउल्लं वयणु करेवि अचप्पल्लं ।  
कम्मु करेप्पिणु निम्मल्लं ज्ञाणु पजुंजसु निच्चल्लं ॥

3. निम्नोद्धृतानां वृत्तानां प्रसङ्गानुसंधानपूर्वकं व्याख्या कार्या, रेखा- 25  
ङ्कितेषु व्याकरणकार्यं च प्रदर्शनीयम् :—

- (a) उक्खयसंठविअनिवेण जेण वच्छत्थलाओ हरिणोवि ।  
उक्खाया भुयदंढे नियम्मि संठाविआ लच्छी ॥
- (b) उब्भमणुद्धं च ठिआ दोलासुं विज्जविजियकन्हारा ।  
कम्भारजम्मपीवल्लकरजुग्गयचरणजुम्माओ ॥
- (c) कालगुगा पढमकईहिं भमियमपरिग्गहेसु मग्गेसु ।  
इहरा मईहिं हीरंति दुक्करं केवि काणंपि ॥
- अथवा,
- (a) विरइअहल्लिकन्दाभदीवओ नवहल्लिहिरत्तकरो ।  
अहल्लिहाराओ कामउव्व पुव्वं भयइ सूरुओ ।
- (b) जोण्हाएव्व मिअंकं कित्तीअव्व सुउरिसं पहाएव्व रविं ।  
सेलं महाणईअ व सिरीअ चिरगिग्गआइ वि अमुच्चंतं ॥
- (c) अक्कमिआ विसएहिं टिरिटिल्लंता पुरन्धिसेवाए ।  
ही दुण्डुल्लन्ति भवे चक्कम्मव्विआ कुक्कम्मोहिं ॥

## SECOND HALF

Examiner—PANDIT VIDHUSEKHAR SASTRI

[Full marks—25]

Translate (a) or (b), and any two of the remaining, passages into English :—

- (a) रामो सन्धेइ सरं विभीसणं  
तेण वल्लइ रक्खसल्लच्छी ।  
दहमुखविणासपिसुणं फुरइअ  
सीआइ तक्खणं वामच्छं ॥  
वामं गिसिअरणयणं रहुवइणो  
दाहिणं च फन्दइ णअणं ।  
बन्धुवहरजपिसुणं पफुरइ  
विहीसणस्स लोअणजुअत्तं ॥

तस्स हभस्स रणमुहे रक्खस-

णाहस्स अहिमुहं अप्पाणो ।

दसहि वि मुहेहि समअं सिहा-

कराळो व्व हुअवहो णिक्कन्तो ॥

(b) अह गिहअम्मि दहमुहे अत्तसि-

अम्मि अ समन्तओ तेहोक्के ।

वअणम्मि उप्पुसिआ भिउडी

ओआरिअं च रामेण धणुं ।

काऊण अ सुरकज्जं रहुवइ-

वीसजिएण कइजणपुरओ ।

जलहरगुप्पन्तधओ सग्गाहिमुहो

रहो कओ माअलिणा ॥

घेत्तूण जणअतणअं कच्चणलट्ठिं

व हुअवहम्मि विसुद्धं ।

पत्तो पुरिं रहुवई काउं

भरहंस्स सप्फलं अणुराअं ॥

(c) दीसन्ति जोयसिद्धा अञ्जण-

सिद्धा वि केवि दीसन्ति ।

दारिहजोयसिद्धं मं ते

लोया न पेच्छन्ति ॥

किं वा कुलेण कीरइ किं वा विणएण किं व रूवेण ।

धणरहियाणं सुन्दरि नराण को आयरं कुणइ ॥

(d) जलणढहणेण न तहा एत्थरघसणेण खण्डणे तह य ।

गुआहलसमतुलणे जं दुक्खं होइ कणयस्स ॥

जइ नत्थि गुणा ता किं कुलेण

गुणिणो कुलेण ण हु कज्जं ।

कुलमकलङ्गं गुणवजियाण

गहयं चिय कलङ्गं ॥

(e) अज्जया भणियो भज्जाए । अज्जउत्त अत्थि इत्थेअ नयरज्जाणे अजियजिणिम्भमन्दिरदुवारदेशे अजियबला देवया अपुत्ताण पुत्तं अविप्ताण वित्तं अरज्जाणं रज्जं अविज्जाणं विज्जं असुक्खाणं सुक्खं अचक्खूणं चक्खुं सरोयाणं रोयक्खयं देइ । कयं सेट्ठिणा तीए ओवाइयं । कमेण जाओ पुत्तो । तस्स कयं अजियसेणोप्ति नामं । जणवमणोरहेहिं सह वट्ठिओ अजियसेणो । सिविस्सयकळाकळाओ लावन्नलच्छिपुज्जं पवन्नो तारुज्जं ॥

## (GROUP H)

## EIGHTH PAPER

## FIRST HALF

Examiner—DR. SUNITIKUMAR CHATTERJEE, M.A., D.LIT.

[Full marks 75]

*The questions are of equal value. You are to attempt FIVE questions only in this half, of which ONE must be selected from among Questions 9 and 10.*

1. Give a brief comparative statement of the contents of the Prakrit grammars of Vararuci, Caṇḍa, and Hemacandra, discussing their dates and their relative importance. What development of Prakrit (or advance in Prakrit studies) do you note in these works chronologically considered?

2. Decline *three* of the following :—

- (i) गतः in Śaurasenī; (ii) नदी in Mahārāṣṭrī; (iii) माता in Śaurasenī; (iv) मय्य in Māgadhi; (v) चक्षुः in Māgadhi; (vi) पुत्र in Apabhraṃśa.

3. Discuss fully *two* of the following :—

- (i) The formation of the future tense in the Prakrits.  
(ii) The formation of the passive in the Prakrits.  
(iii) The conjunctive indeclinables and verbal nouns of Prakrit.

4. Explain fully, giving examples wherever necessary, *three* of the following terms :—

प्राकृतम् ; देशी ; बहुलम् ; आर्षम् ; पैशाची ।

5. Explain the formation of *seven* of the following words, quoting *sūtras* (from either Vararuci, or Caṇḍa, or Hemacandra, with references) :—

सीहो ; सरिसो ; किलित्त ; सुन्देरं ; सीमरो ; भरहो ; दोहलो ;  
छाहा ; पढमो ; हलहा ; चिछाओ ; छट्टी ; वम्महो ; छसिवण्णो ; मसाणं ;  
सूरो ; केवट्टो ; अज्जू ; रुवइ ।

6. Explain *five* of the following *sūtras*, with illustrative examples, and with references to the grammatical texts in which they occur :—

- (i) चवर्गस्य स्पष्टता तयोच्चारणः ।  
(ii) वक्रादिषु ।  
(iii) अमि ह्रस्वः ।  
(iv) इच्च बहुषु—के ।  
(v) मध्येष्व ।  
(vi) ह्रस्वः संयोगे ।  
(vii) समाले वा ।  
(viii) संयोगे परे लोपः ।

7. Give a survey of the use of Prakrit in the Sanskrit drama from Aśvaghoṣa downwards.

8. Identify the dialect of the following passages, and discuss the character of *any two* of them :--

(२) चदुरो मधुरो अ अअं उवणासो । ण जुत्तं अज्ज एरिसेण इव  
अअदाए मए पड्विसिदुं । भोदु । एव्वं दाव भणिस्सं ॥

(ii) अज्ज-गोवालदारओ अज्ज चारुदत्तस्स पवहणं अहिरुहिअ अवक्कमदि  
त्ति जइ कहिज्जदि, तदो अज्ज-चारुदत्तो रण्णा सासिज्जइ । ता को एत्थ उवाओ ।  
कण्णाटकहप्पओअं कलेमि ॥

(iii) कथं अपावे चालुदत्ते वावादीअदि । हग्गे णिअलेण शामिणा बंधिदे ।  
 मोडु । अक्कन्दामि । शुणाध अज्जा शुणाध । अत्थि दाणिं मए पवहणपडित्तेण  
 पुप्फकलण्डअजिण्णुज्जाणं वशन्तशेणा नीदा ॥

(iv) अमअमअ गअणसेहर रअणीमुहतिलअ चंद दे छिवसु ।

छित्तो जेहि पिअअमो ममं पि तेहिं चिअ करेहिं ॥

(v) पोलासपुरे नामं नयरे । सहस्सम्बवणे उज्जाणे । जियससू राया ।  
सत्य णं नयरे सद्दालुत्ते नामं कुं भक्कारे आजीविओवासए परिवसइ ॥

(vi) जो गुण गोवह् अप्पणा, पयडा करह् परस्सु ।

तसु हउं कळिजुगि दुल्लहहो बलि किज्जउं सुअणस्सु ॥

9. Discuss the history of *five* of the following Prakrit affixes in the Modern [Indo-Aryan vernaculars :—

(i) दृश्या of the feminine; (ii) किर of the genitive; (iii) आइ', the affix of the neuter plural; (iv) संत of the present participle; (v) adjectival अह, इह; (vi) एष्यन् or दृश्यन् of the future participle passive; (vii) संति of the present tense third person plural; (viii) -द्- of the future.

10. Give a critical account of Hoernle's views regarding the mutual relationship of the various Prakrits.

## SECOND HALF

*Examiner*—PANDIT VIDHUSEKHAR SASTRI

[Full marks—25]

**Translate the following passages into Sanskrit :—**

25

(a) तो कश्चिज्ज चावंकुण्डलमणिकिरणघटिभजीभा वन्धं ।  
 मुक्को रामस्स उरे पढमं हभवन्पुणा दहमुहेण सरो ॥  
 वेभपडिण्ण तेग भ तह धीरो वि परिकम्पिओ रहुणाहो ।  
 अप्पाणणिब्विसेसं सभकं जह णेण कमिअं तेहोक्कं ॥  
 रहुणाहस्स वि दाणो अणुपरिअण्णिअण्णिअण्णि केज्जं ।  
 दहवभणमुभजिहाअं ताळवणवस्सअपरिभणेन भग्गओ ॥

Or,

तो से मुच्छाविहलो लोहिअणीसन्दभरिअलोअणनिवहो ।  
 वारंवारपअट्ठो भमिओ बाहुसिखरेसु मुहसंघाओ ॥  
 अह णिग्गअमिलिप्पहिं अल्लीणसमागएहि स विमुक्करवं ।  
 रअगिअरवाणरेहिं दिण्णं सहिअं च गरुअरणपत्थाणं ॥  
 रोसस्स दासरहिणो मअणस्स अ दूसहस्स रक्खसवइणो ।  
 समअं चिअ अट्ठत्तो दोण्ह वि अणुरुअदारुणो परिणामो ॥

- (b) मुत्ताहलं व कव्वं सहावविमलं सुवण्णसंघडियं ।  
 सोयारक्कणकुहरम्मि पयडियं पायडं होइ ॥  
 अणवरयवहलरोमक्ककञ्जुयं जणियजणमणाणन्दं ।  
 जं ण धुणावइ सीसं कव्वं पेम्मं च किं तेण ॥

Or,

गजन्ति घणा भग्गा य पन्थया पसरियाउ सरियाओ ।  
 अज्ज वि उज्जुयसीले पियस्स पन्थं पलोएसि ॥  
 ताण य पुत्तो नरवाहणो त्ति नामेण उक्कडपयावो ।  
 कमलावइत्ति नामा धूया अच्चं तरुववई ॥

- (c) एवं इत्थीयणरुलहेण तुच्छत्तणेण तम्मन्तचिन्ता निच्चं पि चिट्ठए मूला ।  
 अन्नया गिन्हुन्हपीडिओ हट्ठाओ आगओ गिहं सेट्ठी । दिव्यवसेण न अन्नो को वि  
 कम्मयरो अत्थि त्ति वारन्तस्स वि सेट्ठिणी पाए पक्खाळितं पयट्ठा विणीयत्तणओ  
 चन्दणा । तीए य निस्सहङ्गीए अकयकम्मवभासाए ल्हसिओ सिणिद्धकसिणो  
 केसपासो । वच्छाए केसपासो पङ्किले खिइतले पडन्तो पङ्केण मा लिप्पउ त्ति  
 भरिओ लीळालट्ठीए सेट्ठिणा ।

Or,

पहाए ते पडहदाणपुव्वं उग्घोसणं एणन्ति । जो कणयसारसेट्ठिधूर्यं  
 कणयसुन्दरिं सप्पदट्ठं जीवावेह सेट्ठी से दीणारलक्खं देइ । तओ सुन्दरेण  
 वाराविओ पडहओ । भणिया पुरिसा दंसेह तं मे । तेहिं वुत्तं पसायं काऊण  
 एह । गओ मित्तेण सह सुन्दरो । दिट्ठो सेट्ठी कणयसुन्दरी य । कहिउण  
 जहट्ठियं वुत्तन्तं भणियं सेट्ठिणा भइ कणयसुन्दरिं जीवाविऊण देसु मे जीवियं ।

## (GROUP I)

## FIFTH PAPER

## FIRST HALF

*Examiner*—DR. HEMCHANDRA RAYCHAUDHURI, M.A., PH.D.

[Full marks—70]

1. Write a note on the historical literature of Ancient India. What are, in your opinion, the chief merits of the *Rājataranginī*?

Or,

Give a brief account of the topography of Kasmir, with special reference to the data supplied by Kalhaṇa's chronicle. 16

2. Write a critical note on Kalhaṇa's accounts of Jalauka, Juṣka, Kbiṅkhila, Narendraditya, and Mātigupta. 16

Or,

Bring out the importance of the reign of Jayāpīḍa Vinayāditya from the point of view of political and literary history. 16

3. Explain any three of the following passages :— 18

(a) श्रीत्रिलोचनपाळस्य शाहेः साहायकार्थिनः ।

देशं ततो मार्गशीर्षे मासि तं व्यसृजन् पृथक् ॥

(b) प्रातस्ततः स्वयं कोपात् तुरष्कानीकनायकः ।

सर्वभिसारेणागच्छच्छलाहवविशारदः ॥

(c) स शाहिदेशः सामास्यः समुभूत् सपरिच्छदः ।

किमभूत् किमु वा नाभूदिति सङ्गिन्यतेऽधुना ॥

(d) सप्तभिर्मूर्च्छभूपादैः समं मिहितदामरः ।

तेनानीतो दरद्राजो यन्नादचलमङ्गलः ॥

(e) शौर्यं निष्परिवारस्य पार्थस्योत्तरगोम्रे ।

उरशा सम्प्रवेशो वा भुतं मल्लस्य मानिनः ॥

4. Write notes on any four of the following :— 20

(a) The Laukika era.

(b) Śarvabhauma and Pradeśakeśvara.

(c) कविर्वाक्पति-राजश्रीर्भूषभूत्पादि-सेवितः ।

(d) Candracārya, the contemporary of Abhimanyu I.

(e) Śūra, the minister of Avantivarman.

(f) Zain ul-ābidin (Jainollābbadīna).

## SECOND HALF

Examiner—DR. AMARESWAR THAKUR, M.A., PH.D.

[Full marks—30]

Translate into English (a) and either (b) or (c) :—

30

(a) एवंविधस्य च पुण्यवतः कथञ्चित् प्राप्तस्य केन प्रियं समाचराम इति परिप्लवं चेतो नः । सकलवनचरसार्थसाधारणस्य कन्दमूलफलस्य गिरि-सरिदम्भसो वा के वयम् । उपयोगन्तु न प्रीतिर्विचारयति । यदि च नोपरुणद्धि कञ्चित् कार्यलवम् अरक्षणीयाक्षरं वा कथनीयं कथयतु भवान् श्रोतुमभिलषति हृदयं सर्वमिदं नः । केन कृत्यातिभारेण भव्यो भूषितवान् भूमिम् एताम् अभ्रमणयोग्याम् । कियदवधिर्वा शून्याटवीपर्यटनक्लेशः कल्याणराशेः । कस्माच्च सन्तप्तरूपा इव ते तनुरियमसन्तापाह्वा विभाव्यते ।

(b) आचार्यस्तु ताम् उद्धृत्य बबन्ध बन्धुरे स्कन्धभागे भूपतेः । अथ नरपतिरपि प्रीतिमुपदर्शयन् प्रत्यवादीत्—आर्य्य ! रत्नानामीदृशा-नामनर्हा प्रायेण पुरुषाः । तपःसिद्धिरियमार्थस्य देवताप्रसादो वा । के च वयमिदानीम् आत्मनोऽपि किमुत ग्रहणस्य प्रत्याख्यानस्य वा । भवद्दर्शनात् प्रभृति प्रभूतगुरुगुणगणहृतेन हृदयेन परवन्तो वयम् । सङ्कल्पितमिदमामरणाद् आर्य्योपयोगाय शरीरम् । अस्मै कामचारो न कर्त्तव्यानामिति ।

(c) अपरेशुश्च प्रातरेवोत्थाय वाजिनमधिरुष्य समुच्छिन्नश्वेतातपसः समुद्धूयमानधवलचामरयुगलः कतिपदैरेव राजपुत्रैः परिवृतो वैरवाचार्य्यं सवितारमिव शशी द्रष्टुं प्रतस्थे । गत्वा च किञ्चिदन्तरं तदीयमेवाभिमुखमा-पतन्तमन्यतमं शिष्यमद्राक्षीदप्राक्षीश्च क्व भगवानास्त इति । सोऽकथयत्—अस्य जीर्णमातृगृहस्य उत्तरेण विल्ववाटिकामध्यास्त इति । गत्वा च तं प्रदेशमवततार तुरङ्गमात् प्रविवेश च विल्ववाटिकाम् ।

(GROUP I)

SIXTH PAPER

Examiners—{ PROF. D. R. BHANDARKAR, M.A., PH.D.  
DR. B. M. BARUA, M.A., D.LIT.

Answer FIVE questions only, including Question 1, which is compulsory.

1. (a) Atikrātam amtaram na bhūtapurva sava kāle athakampme vā paṭivedanā vā. Ta mayā evaṁ katam : sava kāle bhūtapamānasa me

orodhanamhigabbhāgaramhi vachamhi va vinitamhi cha uyānesu cha savatra paṭivedakā sṭitā—athe ime janasa paṭivedetha iti.

(b) Aṭhavaśābhīsitashā Devānampiyasha Piyadashine lājine Kalligā viitā. Diyadhamāte pānashatashabaśe ya taphā apavudhe śatasha hashamāte tata hāte bahutāvumtake vā maṭe.

(c) Nathi chā sho janapade yatā nathi ime nikāyā ānaptā Yoneshu barmmane chā shamane chā nathi chā kuvā pi janapadashi yatā nathi manushānam ekatalashi pi pāshadashi no nāma pashāde.

(d) Magesu pi me nigohāni lopipitāni chhāyopagāni hosampti pasumunisānam, ambavaḍikyā lopāpitā, aḍhakosikyāni pi me ndupānāni khānāpāpitāni, nipsidhiyā cha kāśpitā, āpānāni me bahukāni tata tata kāśpitāni paṭibhogāye pasumunisānam. Lahuke chu esa paṭibhoge nāma. Vividhāyā hi sukhēyanāyā pulimehi pi lājini mamayā cha sukhayite loke. Inam chu dhammānupaṭipati anupaṭipajamtu ti—etadathā me esa kaṭe.

(e) Etāye cha aṭhāye hakaṃ dhammate pamchasu pamchasu vasesu nikhāmayisāmi e akhakhase achamdam sakhinālabhe hosati. Etam aṭham janitu tathā kalampti atha mama anusathi ti. Ujenite pi chu kumāle etāyeva aṭhāye nikhāmayisam. Hedissam eva vagam no cha atikāmayisati tīma varāni.

(i) Transcribe the extract (a) in Asokan Brāhmī or Kharoṣṭhī. 8

(ii) Rewrite the extract (d) in Sanskrit. 8

(iii) Discuss the bearing of the extract (b) on the military strength of Kalinga and that of the extract (c) on the Hinduisation of India. 8

(iv) Translate any two of the above extracts into English, adding explanatory notes where necessary. 16

2. Write short explanatory and critical notes on any four of the following :— 15

(a) *Asti pi tu ekachā samājā sādhumatā.*

(b) *Atikātam amṭaram na bhūtaprurvaṃ dhammamahāmātā nāma.*

(c) *Asti jano uchāvacham maṃgalam karote.*

(d) *Mahālake hi vijitam.*

(e) *Lajukānam abhikāle va damḍe vā atapatiye kaṭe.*

(f) *Mayā samghe upayile.*

(g) *Lumminigāme ubolike kaṭe athabhāgiye cha.*

3. Distinguish between :— 15

(a) *Mahāmātā* and *Dhammamahāmātā.*

(b) *Dhammayātā* and *vihārayātā.*

(c) *Bherighosa* and *dhammaghosa.*

(d) *Dhammathambha* and *silāthambha.*

4. Give a general idea of dialectical peculiarities of the inscriptions of Asoka, noting the points in which the Asokan language agrees with and differs from Sanskrit. 15

5. What are the probable results of the discovery of a new set of Rock Edicts in South India, south of Mysore? 15

6. Write a short dissertation on the administrative system of Asoka, dealing with the following points :— 15

(a) improvement on the earlier system ;

(b) machinery employed ;

and (c) methods and ideals.

7. What are the main tenets of Asoka's Dhamma, and how far can these be shown to tally with the general tenets of Hinduism and Buddhism? 15

8. Ascertain the value of the inscriptions and legends of Asoka as historical materials. 15



## (GROUP I)

## SEVENTH PAPER

*The questions are of equal value.*

## FIRST HALF

**Examiner—DR. NIRANJANPRASAD CHAKRABARTI, M.A., PH.D.****[Full marks—50]***Attempt ANY THREE*

1. Comment on the following with reference to the context :—

(a) Mālava-gaṇa-sthitivaśāt=kāla-jñānāya likhiteshu.

(b) Atha jayati janendrarāḥ śrī-Yasodharmā-nāma..... || Aṅga jiti vijayate jagatīm=punāś=cha śrī-Vishṇuvarddhana-narādhipatiḥ sa eva |

(c) Ummūly=Ācharya-Nāgasena-g ..... dāṇḍair=grā-hayat=siva koṭa-kulajam Pushp-āhvaye kṛdatā.

(d) Chūḍā-pushp-opahārair = Mmihirakula-nriṇ = ārch-chitam pāda-yugmaṁ.

(e) Svayam-adbhigata-Mahākshatrapa-nānnā.

2. Give, from the inscriptions you have read, an idea of the conditions of land-tenure and land-revenue administration in North Bengal during the fifth and sixth centuries A.D.

3. Discuss the importance of the Junāgaḍh Rock Inscription of Rudradāman from literary and historical points of view.

4. Ment on the conquests of Samudragupta in extreme south and define the dominion under his direct government.

5. State all that you know of Skandagupta and his government from the inscriptions of his time.

## SECOND HALF.

**Examiner—DR. HEMCHANDRA RAY, M.A., PH.D.***Answer only THREE questions, of which the FIRST must be one.*

1. Translate the following into English, adding historical and critical notes :—

(a) Pitari divam=upete viplutām vanśa-lakṣmīm bhuja-bala-vijit-ārīr =yyaḥ prati-hṭhāpya bhūvaḥ jitam=iti paritoṣhān=mātaram sāsra-netrām hata-ripur=siva Kṛishṇo D oakīm=abhyupetaḥ.

(b) Kṛ t-n-ī-prithvi-jay-ārthena rāñ=siv=cha sah=āgataḥ bhakya bhagavataś=Sambhor=ggulām=etām=akārayat.

(c) Ā Laubitya-opikṇṭhāt=tala-vana-guḥan-opatyakād=ā Mahendrād = ā Gaṅg-śālistha-sanos=tuhinaśikhariṇaḥ=paśū himād=ā puyodheḥ | Sāmantair =yasya bāhu-craviṇ-īhṛita-madaiḥ pādavor=ānamadhbis=chudāratn-āṇsu-rāji vyatikara-śabalā bhūmi-bhāgaḥ kriyate |

2. Write notes on the following, supporting your statements by epigraphic evidence :—

(a) Origin of the Senas.

(b) Their conquests under Vijayasena.

3. Write a short history of the Maukharis with special reference to the Haraha inscription of Išānavarmam and other contemporary records.

4. Give an account of the Sailodbhavas of Kōṅḍa-Manḍala from epigraphic sources.

5. Explain the historical significance of the following passage :—

Bhojair=mmatsyair sa Madraiḥ Kuru-Yadu-Yavanā-vanti-Gandhāra-Kirai-bhūṇair=vyāloa-man-ī-pranati-paripata-ih sādhu-saṅgrīr=yyamāṇaḥ | hrishyat-Pañcālavarddh=oddhṛita kanakamayā-svāvishik=odakumbho datta śrī-Kanya-kubja=salalita-chalita-bhrulātā-lakshma yena |

6. Transcribe into Roman or Devanāgarī character the passage appearing on attached plate :—

## (GROUP I)

## EIGHTH PAPER

## FIRST HALF

*Examiner—DR. HEMCHANDRA RAYCHAUDHURI, M.A., PH.D.*

[Full marks—50]

THREE questions to be attempted, including Question 5.

1. "In addition to a wider geographical outlook, the Brāhmaṇa period is marked by the knowledge of towns and definite localities." Elucidate. 15
2. "The ancient Indians had a very accurate knowledge of the true shape and size of their country." Critically examine this statement. 15
3. Write notes on :— 15  
Nagarahāra, Pushkalāvati, Sā'ātura, Bhṛigu-kachha, Prithudāka, Ahichhatra, Sankisa, and Samatāṭi.
4. Discuss the denotation of the 'Pūrva-deśa,' with special reference to the evidence of the *Kāvya-mīmāṃsā*
5. Comment on the following :—

(a) भारतस्यास्य वर्षस्य नव सिदान् निबोध मे ।

समुद्रान्तरिता ज्ञेयानि त्वगम्याः परस्परम् ॥

(b) पुण्यो गिरिर्दुर्जयन्तो रैवतोऽर्जुन एव च ।

(c) कृपा पलाशिनौ चैव युक्तिमत प्रभवाः स्मृताः ॥

(d) कश्याय मेखलासुष्टासामन्तिनैः कपादपाः ।

वर्द्धमानाः कोशलाश्च सुखे कूर्मैः संस्थिताः ॥

## SECOND HALF

*Examiner—DR. SUKTHANKAR*

[Full marks—50]

Translate into idiomatic Sanskrit any two of the following passages :—

(a) But Bhīma is not the only one who performs these prodigies of valour. Paraśurāma exterminates all the Kṣātrīyas not once, but many times. Ghaṭotkaca is killed while flying in the air and in his fall crushes a whole legion of soldiers; but his mother was an ogress, Hīdimbā, and anything is possible for the offspring of Hīdimbā and Bhīma. Pradyumna does wonders against Salva; Bhīṣma can vanquish hundreds of princes single-handed. When the Kuru host was carrying off Virāṭa's cattle, Arjuna routed them practically unaided. Attacked by the great Kaurava warrior on all sides, Arjuna is pierced by hundreds of arrows, but remains unmoved. Likewise Arjuna wounds Bhīṣma with a thousand shafts without any appreciable effect.

(b) Such exaggerations are no exceptions, but form the general rule. One has to get used to them in the Indian epic, for at times it is difficult to get behind these exaggerations and think of a substratum of fact underlying them. The grotesqueness and improbability of some parts of the stories may lead us to reject the whole as imaginary; but, as has been pointed out, we must always

guard ourselves against such an assumption. The question remains whether all heroic stories were ultimately based on fact, or whether some were mythical in origin. A few Teutonic stories have been sometimes held to be ultimately myths.

(c) As a mother, even at the risk of her own life, protects her son, her only son, so let there be goodwill without measure among all beings. Let goodwill without measure prevail in the whole world, above, below, around, unstinted, unmixed with any feeling of differing or opposing interests. If a man remain steadfastly in this state of mind all the while he is awake, whether he be standing, walking, sitting, or lying down, then is come to pass the saying, 'Even in this world holiness has been found.' The following are the Ten Fetters, evil states of mind, or sins, from which the aspirant is freed as he treads the Four Paths.

## PALI

### FIRST PAPER

*The questions are of equal value*

### FIRST HALF

*Examiner—MR. SAILENDRANATH MITRA, M.A.*

*Only THREE questions should be attempted, including Question 1, which is compulsory.*

1. Translate any two of the following extracts into English, adding notes where necessary :—

(a) Na kho Ambaṭṭha anuttarāya vijjā carapa-sampadāya jāti-vādo vā vuccati, gotta-vādo vā vuccati māna-vādo vā vuccati : "Arahasi vā maṃ tvam arahaṣīti." Yattha kho Ambaṭṭha āvāho vā hoti vivāho vā hoti āvāha-vivāho vā hoti etth'etaṃ vuccati jāti-vādo iti pi, gotta-vādo iti pi, māna-vādo iti pi : "Arahasi vā maṃ tvam na vā maṃ tvam arahaṣīti." Ye hi keci Ambaṭṭha jāti-vāda-vinibandhā vā gotta-vāda vinibandhā vā māna-vāda-vinibandhā vā āvāha-vivāha-vinibandhā vā, ārahā te anuttarāya vijjā-carapa-sampadāya. Pabāya kho Ambaṭṭha jāti-vāda-vinibandhaṃ ca gotta-vāda-vinibandhaṃ ca māna-vāda vinibandhaṃ ca āvāha-vivāha-vinibandhaṃ ca anuttarāya vijjā-carapa-sampadāya sacchikiriyaṃ hotīti.

(b) Idha mahārāja Tathāgato loka uppajjati, araham samimā-sambuddho vijjā-carapa sampanno suga'o loka-vidu anuttaro purisa-dhamma-sārthi satthā deva-manussānaṃ buddho bhagavā. So imam lokam sadevakam samāarakam sabrahmakam sassamaṃ brāhmaṇam pajam sa-deva-manussam sayam abhiññā sacchikatvā pavedeti. So dhammam deseti ādi kalyāṇam majjhe kalyāṇam pariyoṣāna-kalyāṇam sāttham savyaṇṇanam, kevala-paripuṇṇam parisuddham brahmacariyaṃ pakāseti. Tam dhammam supāti gahapati vā gahapati-putto vā aññatarasmiṃ vā kule paccājāto. So tam dhammam sutvā Tathāgato saddham patilabbati.

- (c)
1. Chandā dokaṃ bhayā mohā  
Yo dhammam ativattati,  
Nibhīyati tassa yaso kāla pakkhe va candimā.
  2. Chandā dokaṃ bhayā mohā  
Yo dhammam nātivattati,  
Apurati tassa yaso sukkapakkhe va candimā.
  3. Yo ca sitaṭṭha uḥhanca tipā bhiyyo na maññati  
Karam purisa-kiccāni so sukhā na vibhīyati.

2. Explain fully the philosophical views attributed to the Antānantikas. Can Nirvāṇa be rightly attained, acting according to these views? If not, why?

3. Give a short account of any two of the following teachers and trace the history, if any, of the development of their doctrine :—

(a) Ajita kesa-kambali, (b) Pakudha kaccāyano, (c) Sañjaya Belatṭhi-putto.

4. What was the relative position of the various social grades in ancient India about the sixth century B.C.? Did the Brahmins ever recognise the superiority which the Kshatriyas are alleged to have established over them?

5. Explain fully the symbolical meaning of the popular practice of saluting the six quarters as discussed in the Siggālovāda Sutta.

## SECOND HALF

Examiner—MR. SAILENDRANATH MITRA, M.A.

Only THREE questions should be attempted, of which Question 1 must be one.

1. Translate into English :—

(a) Kassa hi nāma bhante abālassa aduṭṭhassa amūlhaṣṣa avippallatt-hacittassa āyasmā Sāriputto na ruceyya, Paṇḍito bhante āyasmā Sāriputto mahāpaṇḍito bhante āyasmā Sāriputto, puthupaṇḍito bhante āyasmā Sāriputto, hāsapāṇḍito bhante āyasmā Sāriputto, javanaṇḍito bhante āyasmā Sāriputto, tikkhaṇḍito bhante āyasmā Sāriputto, nibbedhikaṇḍito bhante āyasmā Sāriputto, appiccho bhante āyasmā Sāriputto santuṭṭho, bhante āyasmā Sāriputto, pavivitto bhante āyasmā Sāriputto, asamsuṭṭho bhante āyasmā Sāriputto, āraddhaviṇṇo bhante āyasmā Sāriputto, vattā bhante āyasmā Sāriputto, vacanakkhamo, bhante āyasmā Sāriputto, codako bhante āyasmā Sāriputto, pāpagaṇhi bhante āyasmā Sāriputto, kassa hi nāma bhante abālāssa adu-ṭṭhassa amūlhaṣṣa avippallatt-hacittassa āyasmā Sāriputto na ruceyyāti.

(b) Sākhāpattaphalupeto khandhimā va mahādumo,  
Mulavā phalasampanno patitṭhā hoti pakkhinam,  
Manorame āyatane sevanti nam vihaṅgamā  
Chāyapā chāyatthikā yanti phalattṭham phalabhejino.  
Tattha eva silasampannam saddham puris-puggalam  
Nivātavnttiṃ atthaddham sotatam sakhalam mudum  
Vitarāgā vitado-ā vitamohā anāsava  
Puññakkhetṭhāni lokasmim sevanti tādisam naram.  
Te ta-sa dhammam desenti sabbaḍukkhaṇudanam  
Yam so dhammam idhaññāya parinibbāti anāsavo'ti.

2. Write, in your own words, in Pāli, a brief commentary on the following :—

Antojatā bahijatā jaṭāya tatṭhā paṭā  
Tam tam Gotama pucchāmi, ko imam viṇṇaye jaṭan'ti,  
Sile patiṭṭi āya nara sapaṇḍito, cūtam paṇḍita bhāvayam,  
Aotāpi nipako bhikkhu, so imam viṇṇaye jaṭan'ti,  
Yesam rāgo ca doso ca, aviṇṇā ca, virāṇiā,  
Khippasavā arahant, tesam viṇṇatā jaṭā,  
Yattha nāmaṭṭha rupanca, asesaṃ uparujjhati,  
Paṭigham rupasaṇḍā ca, ettha sā chijjate jaṭāti.

3. "Sammāditṭhi Sammāditṭhi āvuso vuccati. Kittāvatā nu kho āvuso ariyasāvako Sammāditṭhi hoti?"

Elucidate the central idea of Buddhism which is involved in the answer to the above question.

4. Draw a historical picture of Kosala from the evidences of the Kosala-amyutta.

5. Estimate the literary value of the different types of composition—sutta, eyya, and the rest—which you come across in the Nikāyas.

## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner—MR. GOKULDAS DE, M.A.**Attempt THREE questions only, including Question 1, which is compulsory*

1. Refute or justify the contention that the Vinaya of the different schools is based upon a parent redaction. How far does the Pāli redaction represent the original form? Briefly discuss the views of Dr. Oldenberg on the point.

2. Distinguish between the disciplinary rules of the Mahāvagga and those of the Pātimokkha. A count for the growth and development of each.

3. Give, according to the Mahāvagga, a short review of the circumstances under which the promulgation of the earliest of the Vinaya rules took place, and describe, so far as can be gathered from these rules, the earliest style of a Buddhist Vihāra together with its constituent parts.

4. Dwell at length on the importance of the study and practice of the Vinaya in the light of the following stanza :—

Pamuttāhamhi ca Suttante Abhidhamme ca tāvade |  
Vinaye avinattāhamhi puna tiṭṭhati sāsanaṃ ||

5. Translate into English, and with reference to the context, *any three* of the following Vinaya rules, bringing out their bearing on the formation of the Saṅgha :—

(a) Anujānāmi bhikkhave tumheva dāni tāsū-tāsū disāsū tesu tesu jana-padesu pabbāsetha upasampāsetha.

(b) Yo bhikkhave añño pi aññatitthiyapubbo imesmiṃ dhammavinaye ākankhati pabbajjā, ākaṅkhati upasampadā, tassa cattāro māse parivāso dātabbo.

(c) Tehi bhikkhave bhikkhūhi sabbe' eva ekajjhaṃ sannipatitvā upasatho kātabbo, yattha vā pana therō dhikkhū viharatī tattha sannipatitvā upasatho kātabbo; na tu eva vaggena saṃghena upasatho kātabbo.

(d) Te nānā-sampvā-akaditthiṃ paṭilabanti, nānā-sampvā-akaditthiṃ paṭilāhitvā na pucchanti apacchitvā ekato uposathaṃ karonti, āpatti dukkaṭṭassa.

(e) Anujānāmi bhikkhave saṃghakaraṇiyeṇa gantvā. Sattāhaṃ sannivattā kātabbo'ti.

## SECOND HALF

*Examiner—PROF. VIDHUSEKHAR SASTRI**Attempt THREE questions only, Question 5 being compulsory.*

1. What do you understand by the term *Pātimokkha*? Determine the place of the Pātimokkha code in the Buddhist canon, mentioning its different versions.

2. (i) Comment on the following terms, giving their derivations and Sanskrit equivalents : (a) *pārājika*, (b) *sanghādisesa*, (c) *nissaggiya*, (d) *tiṇa-vatthāraka*, (e) *amūḥavinaya*, and (f) *yebhuyyasikā*.

(ii) Give two examples of each of the first three, together with the procedure to be followed in applying each of the last two.

3. Comment on the Pātimokkha rules as illustrative of the disciplinary system of the Bhikkhus.

4. What is the attitude of Buddhism towards women and how can it be vindicated?

5. Explain fully—

(a) Any three of the following :—

- (i) samatittikam sapadānam ca pipdapatam bhuñjissāmi;
- (ii) gahapatīnam gahapatānīnam vā paccekacivaracetāpannā upakkhaṭā bhavanti;
- (iii) kiṃ paṇimehi khuddānukhuddakehi sikkhāpadehi uddiṭṭhehi yāvadeva kukkucāya vihesāya vilekhāya sapvatanīti;
- (iv) niṭṭhitacivarasmiṃ bhikkhumā ubbhatasmim kaṭhine dasāhaparamaṃ atirekacivaram dbāretabbam;
- (v) ujjhāyanake khīyanake pācittiyam.

(b) Any three of the following :—

- (i) apasakka, (ii) sugatavidatthi, (iii) mānugāmo, (iv) otinno (as in dhikkhn otinno), (v) ujjhāpeti.

### THIRD PAPER

#### FIRST HALF

Examiner—DR. AMARESWAR THAKUR, M.A., PH.D.

[Full Marks—60]

#### GROUP A

Attempt two questions only, including Question 3

1. (a) Give Prakrit equivalents for :— 5  
*sarvajña, tūrya, akṣi, vakra, and vidyut.*
- (b) Give examples of the change of *n* into *l*, *dha* into *bha*, *gha* into *ha*, *e* into *i*, and *u* into *a*, in Pali. 5
- (c) How are Sanskrit *i*, *r*, *ai*, *p*, and *th* represented in Prakrit? 10  
 Give examples.
2. (a) Comment on the following Prakrit forms :— 6  
*ciṭṭhadi, gadu-a, talunī, alahī, kari-adi, and ṇavari.*
- (b) Write a clear note on the difference between Pali and Prakrit declensions and illustrate your answer by declining a masculine or feminine base in *i*. 8
- (c) Illustrate the modes of use of the second case-ending in Pali. 6
3. (a) Define and illustrate *kammadhāraya* and mention some of its peculiar features. 6
- (b) Derive any six of the following words :— 6  
*purindada, bhujaṅga, udadhi, jina, mātā, venayika, opagava, and kattikeyya.*
- (c) (i) एषे चान् यमुगहे ये गृहादो चवदालिच इत्थिहमे परिहादिदि । 3  
 In what particular Prakrit is this passage written? Give reasons for your answer.
- (ii) Translate into Mahāraṣṭri :— 5

एष पुनर्नगरादागतः ।

प्रियंवदे नाम्न्येष विधिना

विवाहितो ब्रह्मचरिणि मनः परितोषः ।

## GROUP B

1.

Either,

9

Give an account of the *Vuttodaya* under the following heads :—  
date and place of composition, authorship, relation with the *Vṛttaratnākara*,  
general scope of its contents, and the commentaries written upon it.

Or,

Criticise the statement : "Pali Prosody still remains a subject for  
the deepest investigation, and hardly as yet has anything approaching a  
system been reached, far less to speak of perfection." Give illustrations  
in support of your answer.

2. Define and illustrate any two of the following metres : *Tanumajjhā*, 6  
*Samāṇikā*, *Sālinī*, and *Sasikālā*.

3. Scan, naming the metre, any one of the following stanzas :— 5

- (a) *Sujjanamānasakañjuvikāsaṃ |*  
*dujjanatitthiyasaṃkapatāpaṃ |*  
*lokanabhuggatamāraji-ūraṃ |*  
*mohatimisaṭṭaṃ paṇamāni |*
- (b) *Ratipatiṇṇaṃ muniṇi jitaṃnidhammaṃ |*  
*sivapathasālaṃ muniṇaṃamālaṃ |*  
*tibbavanaketum subhazupahetum |*  
*bhāṇathāṇā bhoṇṇaṃ sulaḍḍhiṃ |*

## SECOND HALF

Examiner—DR. SUNITIKUMAR CHATTERJEE, M.A., D.LIT.

[Full marks—40]

Answer THREE questions only

1. What do you understand by *Satem* and *Centum* Languages? Indicate by means of a diagram the position of Pali in the Indo-European family of languages, showing also its relationship with Bengali, Sinhalese, Persian, Greek, French, English and Russian.

2. Discuss the connexion between Pali and Sanskrit. What do you understand by 'Prakrit' and 'Apabhraṃśa'? How does Pali stand in relation to these? Comment on the statement, that Pali is but a kind of Prakrit.

3. Explain the meaning and origin of the term *Pāli*. Was Pali the language spoken by the Buddha? Are there any indications about a canon of Buddha-literature older than Pali?

4. Explain the working of four of the following phonetic processes, with examples from Pali : Cerebrisation, Nasalisation, Palatalisation, Syncope, Voicing, Anaptyxis. What do you understand by the term 'Māgadhism'?

5. Decline either *sakkā* or *silavant* in Pali, explaining with reference to Old Indo-Aryan (Sanskrit) all the forms.

6. Write a note on the Pali forms for the cardinal numerals.

7. What are the tenses of the Pali verb, and how did they originate from Old Indo-Aryan (Sanskrit)? Discuss also the question of *Parassapada* and *Attanapada* in Pali, giving instances of the survival of the latter in Pali.

8. Write philological notes on eight of the following words or forms :—

*palikha*, *Lāḷa*, *Uruvelā*, *heṭṭhā*, *erikkha*, *kayirā*, *kahāpana*, *ella*, *jeyya-*  
*m-āttānaṃ*, *tissa*, *sabbhir-eva*, *aḍḍhuddha*, *tikkhattuṃ*, *asmase*, *ganteṃ*,  
*ārohitā*, *bajjhati*, *nahāpita*, *culla*, *sukkhuma*, *thera*, *kusinārā*, *ambe*, *vijju*,  
*bhiyyo*.



## FOURTH PAPER

Examiner—DR. NALINAKSHA DUTTA, M.A., PH.D., D.LITT.

The questions are of equal value

Answer ANY SIX questions

1. Examine the conceptions of (a) the Buddha, (b) the Bodhisattva, in so far as they appear in Pali Buddhism. What was the special view of the Lokottarikas? What was the difference between a Buddha and a Paccekabuddha?
2. What light is thrown upon the life of the Buddhist community and the date of the canon by (a) the Edicts of Asoka and other inscriptions, (b) the *Thera- and Therī-gāthās*, (c) the *Kathāvatthu*?
3. Discuss the significance of the words *dhamma*, *saṃkhāra*, and *anicca* in early Buddhism, and indicate briefly the later developments of the same conceptions.
4. Describe the life of an organized Buddhist establishment, including particulars concerning the buildings, dress, and routine, and giving explanations of some technical terms, such as *vihāra*, *gandhakuti*, *saddhivihārin*, *pācittiya*, *karmadāna*, *gaṇḍī*.
5. What Buddhist sects are known to have had a following in Central Asia or other countries outside of India? Give some details. With what developments of Buddhism are the following connected: (a) *Mahāvastu*, (b) *Visuddhimagga*; (c) *Mahāvaiṣṭya-sūtras*, (d) *Avadānas*, (e) *Dhāraṇīs*?
6. State the various causes which led to the decadence of Buddhism in India.
7. (i) Show how far Buddhism owes its greatness to foreigners both within and outside India.  
(ii) Point out the usefulness of Chinese and Tibetan translations for our knowledge of Buddhism and Buddhist literature.
8. Explain how *Sīla*, *Citta*, and *Paññā* comprise the whole of Buddhist discipline.
9. How much of the Upaniṣadic doctrines is traceable in ancient Buddhism. Point out the doctrine contributions, if any, made by Buddhism to the stock of original thoughts in India.
10. Give the Hinayānic and Mahāyānic interpretations of *Pratityasamutpāda* and *Nirvāṇa*.

(GROUP A)

## FIFTH PAPER

Examiners— { DR. B. C. LAW, M.A., PH.D.  
PROF. BENIMADHAB BARUA, M.A., D.LIT.

Only six questions are to be attempted including Questions 9 and 10 which are compulsory.

1. Show how the Book of Birth stories 'contains a record of the every-day life and every day thought of the people among whom the tales were told' 15
2. Mention the Jātakas which have their parallels in the Brahmanical works and Western fables, noting the distinctive features of the Buddhist tales. 15

8. Discuss the relative position of the Canonical Jātakas and the Books of Stories of Heaven and Hell. 15
4. Write a note on the ballads in the Jātakas discussing their literary and historical importance. 15
5. What do you understand by the term 'Bodhisatta'? What are the chief features of the Bodhisatta-idea as developed in the Jātakas? How far is this idea Mahāyānic? 15
6. Refute or justify the theory that the Books of Stories of Heaven and Hell seem to be, on the whole two poetical offshoots of the Canonical Jātaka Book. 15
7. What sort of information can you gather from the Barhut Jātaka labels and illustrations regarding the development of Jātakas? 15
8. What is, in your opinion, the original principle of naming the Jātakas? And how far can the Barhut Jātaka labels account for later deviations therefrom? 15
9. Explain in Pāli any two of the following :— 20
- (a) Jipṇaṇ ca diṣvā dukkhitaṇ ca vyādhitaṇ  
mataṇ ca diṣvā gataṇ āyusaṃkhaṇ  
Kāsāvavatthaṇ pabbajitaṇ ca diṣvā  
tasmā ahaṇ pabbajito mhi rājā ti.
- (b) Coriṇaṇ bahubudhiṇaṇ yāsu saccāṇ sudullabhaṇ  
thiṇaṇ bhāvo durāṇāno macchassevodaḥ gataṇ.  
Musā āsaṇ yathā saccāṇ saccāṇ tāsaṇ yathā musā,  
gāvo bahutiṇassa eva oṇasanti varaṇ varaṇ.  
Coriyo kaṭhiṇā h'etā rājā capala-sakkharā,  
na tā kiñci na jānanti yaṇ manussesu vācānaṇ ti.
- (c) Rudaṇ manuṣṣiṇaṇ rucirā ca piṭṭhi  
veḷuriyavaṇṇūpanibhā ca gīvā  
vyāmaṇattāni ca pekkhūṇāni,  
naccena te dhitaṇ no dadāmiṇti.
- (d) Sace imaṇsa kāyassa anto bāhirato siyā  
daṇḍaṇ nūna gaheṭvāni kāke soṇe ca vāraye.  
Dugāṇḍho asu-sikāyo kuṇṇapo ukkarūpamo  
nindito cakkhubhūtehi kāyo bālābhinandito.
10. Translate into English any three of the following stanzas with reference to the context, adding notes where necessary :— 20
- (a) Ādāya dantāni gajuttamaṇsa  
vaguṇ subbe appaṭime pathavyā  
suvaṇṇarāḍhiṇi samantaṇmodare  
so luddako Kāsipurāṇ upāxampi,  
upanesi so rājakaṇṭhiya dante :  
nāgo hato, banda im'assa dantā ti.
- (b) Avāsiko hotu mahāvihāre  
navakammiko hotu kaṇṭhalāyaṇ  
āloka sandhiṇ divasā karotu  
bhisaṇi te brāhmaṇa yo ahāsi.
- (c) Ye paṇḍitā atthadassā bhavanti  
bhāsanti te yoniso tattha kāle,  
kaṭhaṇ nu gāthāṇaṇ abhāsitaṇaṇ  
atthāṇ naṇeyyaṇ kusalā janindā ti.
- (d) Campeyyakā nāgamālikā  
bhaginimālā atha-m-ettha Koliyā  
ete duṇḍa perināṇitā  
sobbhayanti uragassa mēdiraṇ.

- (c) So agamā nagaram Indapattam  
 oruyha cāgañchi sabham Kurūnam  
 samāgama ekasatam s' magve  
 avhettha yakkho avikampamāno :  
 ko n' idha raññam varam ābhiñeti  
 kam ābhiñeyyāma varam dhanena  
 kam anuttaram jhāma  
 ko vāpi no jeti varam dhanānam.

## (GROUP A)

## SIXTH PAPER

## FIRST HALF

Examiner—PROF. P. MAUNG TIN

[Full marks—50]

The questions are of equal value.

Attempt Question 3 and two others.

1. 'I see him as a cultured young Brahmin in the thirties, born at or near Sāgala, who had been studying since his boyhood, Brahmin-fashion, at the rising cultural town or University of Nālandā, a few hundred miles to the east of his home, near Patna.'

Examine critically this statement regarding the authorship of Milinda-pañha.

2. What arguments can you advance either for or against the view that Milinda became a Buddhist monk?

3. Make a critical estimate of the Milindapañha as a contribution to the study of Buddhism

4. Give the substance of Buddhaghosa's exposition of ācāragocara-sampanno and say what place it occupies in the Silaniddesa of the Visuddhimagga.

5. What do you learn from the Silaniddesa of the Visuddhimagga about the influence of will (*cetanā*) on Sila in Buddhism?

## SECOND HALF

Examiner—MR. SAILENDRANATH MITRA, M.A.

[Full marks—50]

The questions are of equal value.

Attempt Question 1 and one from each of Groups A and B

1. Explain with reference to the context *any four* of the following extracts, fully commenting upon the italicised words or expressions and tracing, wherever possible, the theme of the passages to other contexts, prose or verse :—

- (a) *Adi sīlam patiṭṭhā ca kalyāṇānaṃ ca mātukaṃ |*  
*pamukhaṃ sabbadhammānaṃ tasmā sīlam visodhaye ||*  
*Velā ca samvaram sīlam cittassa adhibhāsanam |*  
*tiṭṭhaṃ ca sabbabuddhānaṃ, tasmā sīlam visodhaye ||*

- (b) *Yad atthi saṃgatam kinci bhava ca yattha labbhati |*  
*sabbam anissaram etam, iti vuttam mahesinā ||*

Na me hoti aśosin ti, bhavissanti na hoti me |  
*samkhārā vibhavissanti, tattha kā paridevaṇā ||*

- (c) Assu thaññaṃ rudhiram samsāraṃ anamataggaṃ saratha |  
 sattānaṃ samsāritaṃ sarāhi aṭṭhinaṃ ca sannicayaṃ ||  
 Sara caturōdadhī upanīte assuthaññaṃ rudhiramhi |  
 sara ekakappam aṭṭhinaṃ sañcayaṃ Vipulena samam ||
- (d) Anamatagge samsarato mahim Jambudīpaṃ upanītam |  
 kolaṭṭhimattagūlikā mātipitusveva na ppahonti ||  
 Sara tiṇṇakaṭṭham sākāpālaṃ upanītam anamataggaṃ |  
 pitūsu caturāṅgulikā ghaṭikā pitupitusveva nappahonti ||
- (e) Evaṃ dhamme viyāpanne vibhinnā suddavessikā |  
 puthu vibhinnā khattiyā patim bhariyā avamaññaṭṭha ||  
 Khattiyā brahmacāryā ca ye c'aññe gottarakkhitā |  
 jātivādaṃ niraṃkatvā kāmānaṃ vasaṃ āgamuṃ ||
- (f) Sapadānaṃ caramāno guttadvāro susamvuto |  
 khippam patim apūresi sampejāno patissato ||  
 Sa piṇḍacāraṃ caritvā nikkhamma nagarā muni |  
 Paṇḍavaṃ abhihāresi, ettha vāso bhavissati ||

## GROUP A

2. 'The separate *Uddānas* or *Indices* (of the Thera-theri-gāthā) seem to be based on a recension or condition of the text different from that which now lies before us.' Justify or refute the statement by illustration from your text.

3. 'From some of Uhammapāla's interpretations it will be seen that he had already before him a corrupt text ; sometimes he has wholly misunderstood it, but generally his interpretations are correct.' Substantiate the remark by suitable examples from your text.

## GROUP B

4. Elucidate the central idea or theme of the *Brāhmaṇadhammika-sutta* and show how and in what particular respects Buddhism stood in conflict with Brahmanism.

5. Discuss the antiquity of the *Sutta-nipāta*, enumerating all available evidences, both external and internal.

## (GROUP A)

## SEVENTH PAPER

## FIRST HALF

Examiner—MR. GOKULDAS DE, M.A.

: [Full marks—50]

The questions are of equal value

Attempt THREE questions only, including Question 1, which is compulsory.

1. Transcribe in Brāhmi character the following extracts, giving an English translation of each with notes where necessary :—

- (a) Vedisakehi dāptakārehi rupakamma katam  
 (b) Rañño siri sātakaṇṇisa  
 āvesanisa vāṣṭhīputasa  
 ānāpāsa dānam.  
 (c) Bhagavato Sākamunino Bodho.  
 (d) Sāḍika sammādam turam devānam.  
 (e) Bhagavato ūkrapti.

2. Write a 'short note on the form and significance of Jātakas as referred to in the Bharhut inscriptions.

3. 'The orthography, the Sandhi, the declension, the compounds, the suffixes, and the phonetic changes all combine to establish a close affinity to Pāli.' Show by examples how far the above statement is applicable to the inscriptions of Bharhut and Sanchi.

4. Trace the influence of Buddhist literature on Bharhut inscriptions in general.

5. Comment on any five of the following :—

(a) *Cakavāko Nāgarājā*; (b) *Sirimā devatā*; (c) *Idasālagūhā*; (d) *Jaṭila-sabbhā*; (e) *Bhagavato dhammacakam*; (f) *Alaṃbusā acharā*; (g) *Sākamunino Bodho*.

## SECOND HALF

Examiner—DR. B. M. BARUA, M.A., D.LIT.

[Full marks—50]

The figures in the margin indicate full marks.

Attempt Question 1 and two of the rest.

1. Translate any four of the following extracts into English, adding explanatory notes where necessary :— 20

(a) *Ṣātireke tu kho samvachhareṃ yañ mayā saṅghe upayīte bādhaṃ cha me pakāṃte imina chu kālena amisaṃ samācā munisaṃ Jaṃbudiṇḍipasi misā devehi.*

(b) *Tedasa-vasābhisitena mamayā dhamma-mahāmātā kaṭā te sava-pāsaṃdesu vivāpaṭṭā dhammādhīṭhānāye chā dhammavaḍḍhiyā hida-sukhāye vā dhammayutasā Yona-Kaṇhoja-Gaṃdhālānām e vā pi aṃne Apalāntā.*

(c) *Sarvata vijite mama yutā cha rāṭṭike cha prādesike cha pañchasa pañchasa vāsesu anusamvānaṃ niyātu etāyeva athāya imāya dhammānussatiyā yathā añña pi kaṃmāya.*

(d) *Silā-vigaḍḍhabhī chā kālāpita silā-thabhe cha usapāpīte hida Bhagavaṃ jāte ti Lummini-gāme ubalike kaṭe aṭṭa-bhāgiye cha.*

(e) *Esa me huthā dhamma-sāvā ānī sāvanayāmi dhammānussathini anusāsāmi etaṃ jane sutu anupaṭipajī sati abhyumnāmisati dhammavaḍḍhiyā cha bādhaṃ vaḍḍhisati.*

(f) *Jano tu uchāvacha-chāraṇdo uchāvacha-rāgo te sarvaṃ va kāsaṃti ekadesaṃ va kāsaṃti vipule tu pi dāte yasa nāti sayame bhāva-sudhitā va kataṃnatā va daḍḍhabbatitā cha nichā bādhaṃ.*

2. What light does the Bhāru edict throw on the religion of Aśoka? Name and identify the *Dhamma-pariyāyas* mentioned in this edict. 15

3. Show from his edicts Aśoka's attitude towards (i) division in the Buddhist church, (ii) religions other than Buddhism. 15

4. 'The thirteenth and fourteenth "regnal years" were busy ones for Aśoka, marking great advance in his spiritual development and religious policy.' 15

Adduce, from the edicts, proofs in justification of the above remark.

5. What explanation of the term *āsava* do you find in the edicts? How far does its meaning agree with Buddhist *āsava* and Jaina *aṇhaya*? 15

## (GROUP A)

## EIGHTH PAPER

## FIRST HALF

## (ESSAY)

*Examiner*—MR. SAILENDRANATH MITRA, M.A.

[Full marks—50]

Write an essay on one of the following subjects :—

- (a) The Buddhist Saṅgha as a centre of learning and discipline.
- (b) The Constitution of Early Buddhist Saṅgha.
- (c) The Buddhist Church in the third century B.C., and Aśoka's relation with it.
- (d) Idealism of Early Buddhist literature.
- (e) Early Buddhist sculpture and Buddhist literature—their inter-relation and results.

## SECOND HALF

## (UNSEEN)

*Examiner*—MR. GOKULDAS DE, M.A.

[Full marks—50]

1. Translate into idiomatic English any two of the following passages :—

- (a) Ambā kapittbā panasā sālā jambū vibhetakā haritākā āmalakā a-satthā padarāsi ca. Cārū timbarukkā c' ettha nigrodhā ca kapittanā madhumadhukā thevanti nice pakkā c' udumbarā. Pārevatā bhaveyyā ca muddikā ca madhuthikā madhup anelakam tattha sakam ādāya bhuñjare. Aññi ettha pupphitā ambā aññe tiṭṭhanti dovita aññe āmā ca pakkā ca bhekavaṇṇā tadūbhayaṃ. Ath' ettha heṭṭhā puriso ambapakkāni gaṇhati āmāni c' eva pakkāni vaṇṇagandharasuttaine. Ath' eva me acchariyaṃ hupkāro paṭibhāti maṃ devānaṃ iva āvāso sobhati Nandanūpamo.

(b) Tattha pāpātipātā veramaṇi ti ādisu veramaṇi nāma virati. Sā ti-vilhā hoti, sampatta-virati samādhāna-virati setu-ghāta-virati. Tattha yo sikkhāpadāni agahetvā pi kevaḷaṃ attano jātigotta-kula-padesādini anussarivā 'Na me idaṃ patirūpan'ti pāpātipātāni na karoti, sampatta-vatthup pariharati, tato ārakā viramati, ta-ssa sā virati sampatta-virati veditabbā. 'Ajjatagge jivita-hetu pi pāṇaṃ na hauāmīti' vā 'pāpātipātā viramāmi' ti vā 'veramaṇi samādiyaṃ'ti vā evaṃ sikkhāpadāni gaṇhantassa pana virati samādhāna-virati ti veditabbā. Ariya-sāvakaṇaṃ pana magga-sampayuttā virati setu-ghāta-virati nāma. Tattha purimā dve viratiyo yaṃ jivitā voropānādi-vasena vitikkamitabbam jivitindriyādi-vatthup taṃ ārammaṇaṃ katvā pavattanti pacchimā nibbānārammaṇā vā.

(c) Assutavā kho puthujjāno attanā maraṇa-dhammo samāno maraṇaṃ anatito paraṃ matam diavā aṭṭiyati harāyati jigucchati attānaṃ yeva atisīvā. Aham pi kho 'mhi maraṇadhammo maraṇaṃ anatito, ahañ c' eva kho pana maraṇa-dhammo maraṇaṃ anatito paraṃ matam diavā aṭṭipeyyam harāyeyyam jiguccheyyam. Na me taṃ assa

paṭirūpan ti. Tassa mayham bhikkhave iti paṭisañcikkhato yo jivite jivitamado so sabbaṃ pabhiyyi ti

Tayo 'me bhikkhave madā. Katame tayo? Yobbanamado ārogyamado jivitamado.

(GROUP B)

FIFTH PAPER

Examiners— { MR. RAMAPRASAD CHAUDHURI, M.A.  
DR. BENIMADHAB BARUA, M.A., D.LIT.

[Full marks—50]

The figures in the margin indicate full marks.

Only six questions are to be attempted including Question 1, which is compulsory.

1. Translate any two of the following extracts, adding notes where necessary :— 30

(a) Katame dhammā avyākata ?

Yasmiṃ samaye kāmāvacarassa kusalassa kammassa katattā upacitattā vipākāṃ cakkhuvijñāṇaṃ uppannaṃ hoti upekkhāsahagataṃ rūpārammaṇaṃ : tasmīṃ samaye phasso hoti, vedanā hoti, saññā hoti, cetanā hoti, cittaṃ hoti, upekkhā hoti, cittaṃ ekaggaṃ hoti manindriyaṃ hoti, upekkhindriyaṃ hoti, jivitindriyaṃ hoti : ye vā pana tasmīṃ samaye aṇṇe pi atthi paṭiccasamuppannā arūpino dhammā—ime dhammā avyākata.

(b) Tattha katīmaṃ kāyāyatanaṃ ?

Yo kāyo catonnam mahābhūtānaṃ upādāya passādo attabhāvapa-riyāpanno anidassano sappatigho :—yena cakkhunā anidassanena sappati-ghena rūpaṃ sanidassanena sappatighaṃ passi vā vassati vā passissati vā passe vā—cakkhun p'etaṃ, cakkhāyatanaṃ p'etaṃ, cakkhuṃ dātu p'esā, cakkhundriyaṃ p'etaṃ, loko p'eso, dvārā p'esā, samudho p'eso, paṇḍaraṃ p'etaṃ, khettaṃ p'etaṃ vatthun p'etaṃ, nettaṃ p'etaṃ, nāyanaṃ p'etaṃ orimaṃ tīraṃ p'etaṃ suñño gāmo p'eso : idaṃ vuccati kāyāyatanaṃ.

(c) Kusalanti kurchitānaṃ salanādhi atthehi kusalaṃ. Api ca ārogyaṭṭhena anavaṇṇaṭṭhena koṭṭasaṃbhūtaṭṭhena ca kusalaṃ. Yath'eva hi kacci nu bhoto kusalanti rūpakāye anāturatāya agelaññaṇa nivyādhitāya arogyaṭṭhena kusalaṃ vuttaṃ evaṃ arūpaṭṭhamme pi kileṣāturatāya kileṣagelaññaṇa kileṣavyādhino abbāvena ārogyaṭṭhena kusalaṃ ti veditabbam.

2. What is the precise connotation of the term *abhidhamma* employed as the title of a division of the Pāli canon ? 14

3. Write explanatory notes on any three of the following terms :— 14  
*avijjā, vicikicchā, paṇā, saddhā, dhamma, and Saṅkhāra.*

4. Compare and contrast between the Suttanta and Abhidhamma bhāṇīyas standing side by side in each of the chapters of the Vibhaṅga, and indicate in the light thereof the relationship between the Sutta and the Abhidhamma Piṭaka as a whole. 14

Distinguish between—

(a) *indriya, āyatana, dhātu ;*

(b) *four avacaras ;*

(c) *saddhā, saddhindriya, saddhābala.*

6. "The burden of Abhidhamma is not any positive contribution to the philosophy of early Buddhism but analytical, logical, and methodological elaboration of what is already given." 14

Refute or justify this remark.

7. Determine the relative chronological position of the Dhamma-saṅgaṇi, the Vibhaṅga, and the Dhātukathā. 14

8. "Dukkaraṃ mahāriṣa bhagavatā kataṃ yam imesaṃ arūpināṃ citta-cetasikānaṃ dhammānaṃ ekārammaṇe vattamānānaṃ vavatthānaṃ akkhāttaṃ : ayaṃ pha-so, ayaṃ vedanā, ayaṃ saññā, ayaṃ cetanā, idaṃ cittaṃ " ti. 14

Develop the idea in the above extract with a view to indicating the possibility of psychology as a science.

9. Discuss the metaphysical significance of the Buddhist Door theory of sense-cognition. 14

10. What are the precise metaphysical implications of *paccaya-sāmaggi* as explained by Buddhaghosa ? 14

### (GROUP B)

#### SIXTH PAPER

Examiners—{ DR. B. C. LAW, M.A., PH.D.  
{ PROF. BENIMADHAB BARUA, M.A., D.LIT.

[Full marks—100]

*The figures in the margin indicate full marks.*

*Only six questions are to be attempted, including Question 8, which is compulsory.*

1. Explain the title *Nettipakarāṇa* and show that it is a treatise on the textual and exegetical methodology. 16

2. Discuss the general importance of the *desanā*, *lakkhaṇa*, *parikkhāra* and *vevacanahāras* in the *Nettipakarāṇa*. 16

3. Distinguish between the methods of treatment followed in the *Abhidhammāvatāra* and the *Abhidhammatthasaṅgaha*. 16

4. State Buddhadatta's conception of *Nāmarūpa*. How far can this conception be said to be influenced by the *Sāṃkhya* idea of *Puruṣa* and *Prakṛiti*. 16

5. Write notes on *any two* of the following topics :— 16

(i) *Citta*, (ii) *Cetasika*, (iii) *Vināka-citta*, (iv) *Puññavipakāpaccaya*, (v) *Kaṅkhāvitaraṇavisuddhi*, and (vi) *Maggāmaggañipada-saṇavisuddhi*.

6. Who wrote the *Abhidhammatthasaṅgaha* ? Is there any reason to disbelieve the statement that Buddhaghosa and Buddhadatta drew materials upon the same source ? 16

7. Write short notes on *any two* of the following :— 16

(i) *Suddhamanodvāravithi*, (ii) *Paññatti*, (iii) *Aniccadhamma* and (iv) *Arūpa-jhāna*.

8. Translate the following extract into English, adding notes where necessary :— 20

Dukkhe aññānaṃ dukkhasamudaye aññānaṃ dukkhanirodhe aññānaṃ dukkhanirodhasāminiyāpaṭipadāva aññānaṃ pubbante aññānaṃ aparante aññānaṃ pubbanāpāraṇte aññānaṃ idapa cayaṭāpaṭikcasamuppannesu dhammesu aññānaṃ. Yaṃ evarūpaṃ aññānaṃ adesaṇaṃ ana-



bhisamayo ananubodho asambodho appativedho asallakkhanā anupalakkhanā apaccupalakkhanā asamapekkhaṇā spaccaakkhakammam dummejham bālyam asampajaññaṃ moho pamoho sammo avijjā avijjogho avijjayogo avijjānusayo avijjāpariyutthānam avijjālaṅgimoho akusalamūlam.

9. What is the difference between the 'atīccasamuppādanaya and the Paṭṭhānanaya? Elucidate the dissertation on this point in the Abhidhammatthasaṅgaha. 16

10. Show how the topics mentioned in the Upatissa Pañha in the Rathavināsa Sutta have been elaborated in the Abhidhammavātāra and the Visuddhimagga. 16

### (GROUP B)

#### SEVENTH PAPER

Examiner—DR. NALINAKSHA DATTA, M.A., PH.D., D.LITT.

[Full marks—100]

The questions are of equal value.

Answer six questions, including Question 1.

1. Translate into English any two of the following passages :—

(a) Nanu atthi devā ajaḷā aneḷamūgā viññū na harthasamvācikā paṭibalaḥ subhāsītadubbhā itānaṃ attham aññatam, atthi devā Buddhē paṣannā Dhamme paṣannā Samghe paṣannā. Buddhā Bhagavantāṃ payirūpāsanti, Buddhā Bhagavantāṃ pañham pucchanti, Būtheṇa Bhagavatā pañhe vissajjite attamaṇā honti, atthi devā na kammāvaraneṇa samannāgatā na kilesāvaraṇena samanāgatā na vipākāvaraṇena samannāgatā saddhā chandikā paññāvanto bhaddā nīyāmaṃ okkamitum kusalesu dhammesu sammattam. atthi devā na mātu-ghātakā na pitu-ghātakā na arhanta-ghātakā na ruhiruppādakā na Samgha-bheda-kā, atthi devā na aññātipātino na aññādayino na kāmesu micchācārino na musāvādino na piṇḍavācā na pharusāvācā na samphappalāpino na abbiñjhāluno abyāpannacittā sammādiṭṭhikāti? Āmantā.

(b) Tassa sammāvimuttassa santacittassa bhikkhuno, kītaṃ paṭicayo natthi karaṇīyam na vijjati. Selo yuthā ekagghano vātena na samratī, evaṃ rūpā rasā saddā gandhā phassā ca kevalā. Itthā Dhammā añiṭṭhā ca nappavedhenti tādino, Thitaṃ cittaṃ vippanutāṃ vayanā assānupassati ti.

(c) Pacchājāta appaṭighā khandhā purejātaṃ imassa appaṭighassa kāyassa pacchājāta-paccayena paccayo Pacchājāta appaṭighā khandhā purejātaṃ imassa appaṭighassa kāyassa, pacchājāta appaṭighā khandhā purejātaṃ imassa appaṭighassa appaṭighassa ca kāyassa pacchājāta-paccayena paccayo.

(d) Sahajāta, nānākhaṇikā. Sahajāta anidassanā cetanā sampayutta-kāmaṃ khandhānaṃ anidassanānaṃ citta-samutṭhānaṇa rūpānaṃ kamma-paccayena paccayo. Nānākhaṇikā anidassanā cetanā vipākānaṃ anidassanānaṃ khandhānaṃ anidassanānaṃ katattā rūpānaṃ kamma-paccayena paccayo.

2. Write a commentary on the following :—

Samayavimutto Arāhā vītarāgo vītaraso vītamāro kṇākarapīro obhā-bhāro anuppattasadattho parikkhīnabhavasāññojano sammadaññaṃ vimutto uk-khittapaligho sampakkapārakkho abbulhesiko viraggaḷo ario pannuaddhajo panna-bhāro viśaṇṇutto avijjitavijayo, dukkamaṃ tassa parināṇaṃ, samudayo pahīno, nirodho sacchikato, maggo, bhāvito, abhiññeyyāṃ abhiññāṇaṃ, parinibbeyaṃ parinibbātaṃ, pahātabbaṃ pahīnaṃ, bhāvitābbaṃ bhāvitaṃ, sacchikātabbaṃ sacchikataṃ, paribhāyati samayavimutto Arāhā arahattā ti? Āmantā.

3. When and on what occasion and by whom was the *Kāthavatthu* composed? Do you find any objection in taking the *Kāthavatthu* as a canonical book?

4. Explain the Vajjiputtaka conception of soul and show how it differs from that of the Theravādins.

5. 'An arhat falls away from arhathood.' Develop the idea of the thesis, showing its bearing on the history of Buddhism.

6. (i) What is the importance of the *Duka-Paṭṭhāna* as a *Abbidhamma* work?

(ii) 'The aim of the *Duka-Paṭṭhāna* seems to have been more a series of exercises in a logic of terms and relations than any attempt to enunciate metaphysical propositions.' Criticise this remark, citing evidences from your text.

7. Explain fully in Pali :—

'Āsavam dhammam paticca āsavo ca no-āsavo ca dhammā uppajjanti hetupaccayā.'

8. Write explanatory notes on the following :—

(a) *Adhipatipaccayo*; (b) *Anantarapaccayo*; (c) *Samanantarapaccayo*; (d) *Kammapaccayo*; (e) *Āhārapaccayo*; (f) *Indriyapaccayo*; (g) *Jhānapaccayo*; (h) *Maggapaccayo*.

9. What is the line of argument followed in the *Kāthavatthu* to establish a thesis? Give a typical instance.

### (GROUP B)

### EIGHTH PAPER

### FIRST HALF

### (ESSAY)

*Examiner*—DR. NALINAKSHA DATTA, M.A., PH.D., D.LITT.

[Full marks—50]

Write an essay on one of the following subjects :—

(a) The nature and the contents of the seven *Abbidhamma* works, and the method of exposition adopted in them.

(b) The mental processes as analysed in the *Abbidhamma* works.

(c) The value of the *abhidhamma* works as glosses on the fundamental principles of Buddhism inculcated in the *Sūtras*.

(d) The contributions of Burma and Ceylon to the *Abbidhamma* literature.

### SECOND HALF

### (TRANSLATION)

*Examiner*—MR. GOKULDAS DE, M.A.

[Full marks—50]

Translate any three of the following extracts into English :—

(a) Mahābhūtasāmaññato ti. Eṭāni hi yathā māyākāro amanipim yeva udekam mapim katvā das-eti asuvaṇṇasam yeva leḍḍum suvaṇṇasam katvā dasseti, yathā ca sayam n'eva yakkho na pakkhi samāno yakkha-bhāvaṃ pi pakkhibhāvaṃ pi das-eti evam evaṃ sayam anilān'eva hutvā mīlam upādārūpaṃ dassenti aṭṭhāni alohi'āni anodātān'eva hutvā odātaw upādārūpaṃ dassenti ti māyākāramahābhūtasāmaññato mahābhūtāni.

Yathā ca yakkhādini mahābhūtāni yaṃ gaṇhanti n'eva tesam tassa anto na bahiṭṭhānaṃ upalabbhanti na ca taṃ nissāya na tiṭṭhanti evaṃ evam etāni pi n'eva aññamaññassa anto na bahiṭṭhāni hutvā upalabbhanti na ca aññamaññam nissāya tiṭṭhanti ti ācinteyyaṭṭhānatāya yakkhādima-hābhūtasāmaññato pi mahābhūtāni.

(b) So hi puthūnaṃ nānappakārakānaṃ kilēśādinam jananādihi pi kāraṇehi puthujjano. Yath'āha : puthunānākilēse jñenti ti puthujjanā, puthuayibatasaṃkāyadīṭṭhikā ti puthujjanā, puthu-nānāsatthārāṇaṃ mukhullokakā ti puthujjanā, puthusalbaṇṇatīhi avuṭṭhitā ti puthujjanā, puthu-nānābhisaṅkhāre abhisaṅkharotī ti puthujjanā, puthu-nānā-oghehi vuyhanti....pe.....puthu-nānā santāpehi santappanti ti puthujjanā, puthu-nānāpariṭṭhābehi pariḍayanti ti puthujjanā, puthu-paṇḍehi nīvaraṇehi āvaṭṭā nivutā ovutāpihitā paṭicchannā paṭikujjitā ti puthujjanā, puthūnaṃ vā gaṇanapatham atītānaṃ ariyadhammaparaṇimukhānaṃ nīcadham-masamācārānaṃ janānaṃ antogadhattā ti pi puthujjanā.

(c) Piṇḍāya Kosalaṃ puraṃ pāvisi aggapuggalo |  
anukampako purebhattaṃ taṇhānighātano muni ||  
Purisassa vaṭṭapaṃso [hatthē] sabā apupphehi lamkato |  
so addasāsi Sambuddhaṃ bhikkhusaṃghapurakkhataṃ ||  
Pavisantāṃ rājamagge devamanussapūjitaṃ |  
haṭṭho cittaṃ pasādevā Sambuddhaṃ upasaṃkami ||  
So [taṃ] vaṭṭapaṃsaṃ surabhiṃ vaṇṇavantaṃ manoraṃaṃ |  
Sambuddhasa' upanāmesī pasanno sehi pānihi ||  
Tato aggisikhā vaṇṇā Buddhasa lapanantarā |  
sahassaraṃsī vijjuriva okkā nikkhanti ānandā ||  
Padakkhiṇaṃ karitvāna sēse ādiccābandhuvo |  
tikkhattuṃ parivaṭṭetvā muddhaṃ antara-  
dhāyathā ti ||  
Idaṃ diavān acchariyaṃ abbhutaṃ lomahamsanaṃ |  
ekamsaṃ cīvaraṃ katvā āvando etad abravi ||  
Ko hetu sitakammāya byākaroḥi mahāmuno |  
dhammaloko bhavissati, kaṅkhā vitara no muno ||

(d) Katamo ca puggalo ugghaṭṭitaññū. Yassa puggalassa saha-udāhaṭṭavelāya dhammābhissamayo hoti, ayaṃ vuccati puggalo ugghaṭṭitaññū. Katamo ca puggalo vipacitaññū. Yassa puggalassa samkhittena bhāsitaṃ vitthārena atthe vibhāṇiyamāre dhammābhissamayo hoti ayaṃ vuccati puggalo vipacitaññū. Katamo ca puggalo neyyo Yassa puggalassa uddesato paripucchato yonisinanasi-karoto kalyāṇamitte sevato bhajato payirupāsato anupubbena dhammābhissamayo hoti, ayaṃ vuccati puggalo neyyo ti.

### (GROUP C)

#### FIFTH PAPER

#### FIRST HALF

*Examiner*—MR. CHARANDAS CHATTERJEE, M.A.

[Full marks -50]

*The figures in the margin indicate full marks.*

*Answer Question 1 and ANY TWO of the rest.*

1. Translate any one of the following extracts into English :—

(a) Hatthassatharokammassa kusalo katupāsano  
so Gāmaṇī rājasuto Mahāgāme vasi tudā.  
Rājā rājasutoṃ Ti-saṃ Dīghavāpimhi vāsaya  
ārekkhituṃ janapadaṃ sampānnebalavāhanaṃ.

Kumāro Gāmaṇī kāle saṃpassanto balaṃ sakaṃ  
 “yujjhissam Damiḷeḷi” ti pitu rañño kathāpayi.  
 Rājā taṃ anurakkhanto “oragaṇṇaṃ alaṃ” iti  
 vāresi, yāvataṭṭhiyaṃ so tatheva kathāpayi.  
 “Piṭṭha me puriso honto nevaṃ vakkhati, ten’idaṃ  
 pilandhatū” ti pesesi itthālaṃkāraṃ assa so  
 Rājāha tassa kujjhivā : “karoṭṭha hemasaṅkhalim,  
 tāya naṃ bandhayissāmi, nāññathā rakkhiyo hi so”.  
 Palāyitvāna Malayam kujjhivā pituno agā.  
 dutṭhattā yeva pitari āhu taṃ Dutthagāmaṇiṃ.

- (b) Yuddhe dāne ca sūrena sūriṇā ratanattaye  
 paṇṇānāma arittena sāsanaṃ jotanaṭṭhiṇā  
 rañña kataññunā tesu thūpakārāpanādito  
 vibhāramahānāntāni pūjetuṃ ratanattayaṃ  
 paricattadhaṇānetiṃ anagghāni vimuñciya  
 sesāni honti ekāya ūnavisatikoṭṭiya  
 Bhogā dāsaḍḍhavidhadosaḍḍisā pi  
 paññāvisesasaṃhitehi janehi pattā  
 hont’eva pañcagūṇaṃ ogagahitasārā :  
 iccassa sāragahane marimā yateyyā ti.

2. “The Ceylon Chronicles would not suffer in comparison with the best of the Chronicles, even though so considerably later in date, written in England or in France.” (*Buddhist India*.) Critically examine this remark of Prof. Rhys Davids in the light of the sources from which the author of the Mahāvamsa drew his material. 16

3. Describe briefly the various measures adopted by the emperor Aśoka Maurya for the propagation of Buddhism in Ceylon. 16

4. Sketch the history of the reign of Dutthagāmaṇī Abhaya with special reference to his campaign against the Damiḷas. 16

5. Recount the services rendered by Vaṭṭagāmaṇī Abhaya to the cause of Buddhism in Ceylon. 16

## SECOND HALF

Examiner—DR. NALINAKSHA DATTA, M.A., PH.D., D.LITT.

[Full marks—50]

The questions are of equal value.

Answer ANY THREE questions.

1. Translate into English :—

Mahātherā ca sudhammasabhāyaṃ sannipatitvā taṃ pakkosetvā ovaḍḍipsu. Tesu pana mahātheresu eko therō bhūpālassa saṃgharaṇṇo ca mukhaṃ oloketvā bhagavato pana sammāsambuddhassa mukhaṃ analoketvā Munindaḍḍhosatheraṃ evaṃ āha : Idāni āvuso imasmiṃ Marammaratṭhe sabbe pi bhikkhū bhūpālassa saṃgharaṇṇo ca āṇaṃ anuvattitvā ekampiṇṇā yeva nhesuṃ. Tvam yeva eko saddhiṃ pari-āya ; ārupana vattam caritvā nissidasi. Kusaṃ pana tvam mānathaddho hutvā idi-āṇaṃ anā-ā-āṇaṃ avijahitvā tiṭṭhasi ti.

2. “The Sāsana-vamsa is highly important for the ecclesiastical history of Ceylon.” Justify this remark.

3. Name the nine places, to which missionaries were despatched by Moggalliputta Tissa, and show how far the author of the Sāsana-vamsa is right in identifying the places.

4. Write biographical notes about four of the following :

(i) Paññāsāmi ; (ii) Anuruddharāja ; (iii) Chapada therā ; (iv) Saddhamma-viri ; and (v) Disāpānā-mokkha ācariya.

5. “Pubbe kira Arimaddanagare mātugāmā pi gandham uggaṇhimsu.” (*Sāsana-vamsa*, p. 78.) Develop this statement.

## (GROUP C)

## SIXTH PAPER

Examiner—{ PROF. D. R. BHANDARKAR, M.A., PH.D.  
 ,, BENIMADHAB BARUA, M.A., D.LIT.

[Full marks—100]

The figures in the margin indicate full marks.

Attempt FIVE questions only, including Question 1 which is compulsory.

1, (a) Aṭṭhavasābhissitashā Devānampīyasa Piyasine lājine Kaligā vijitā. Diyadhamāte pāśasahasasāde yetaphā apavudhe sāsasahasamāte tata hate bahutāvaptake vā maṭe.

(b) Ayam dhammalipi Devānampriyena Priyadasinā rāñā lekhāpitā asti eva samkhitena asti majhamena asti vītatena. Na cha sarvaṃ sarvata ghaṭitaṃ. Mahālake hi vijitaṃ bahu ca lokhitaṃ likhāpayiṃsaṃ cheva.

(c) Ava-ite-pi-cha me āvuti : samdhana-baddhānaṃ munisānaṃ patavadhānaṃ tippi divasāṃ me yote dīpne nātikā va kāni nijhapayasamti jivitāye tānaṃ nāsamtaṃ vā nijhāpayitā dānaṃ dāhamti pālatikaṃ.

(d) Adhikāni adhatiyāni vasaṃ ya hakaṃ upāsake no tu kho baddhaṃ pakamte husaṃ ekaṃ samvachharaṃ sātireke tu kho samvachharaṃ yaṃ mayā samghe upāyite baddhaṃ cha me pakamte. Imiṃsā cu kālena amiṃsā samānā munisā Jambudīpasi miṃsā devehi.

(i) Transcribe the extract (a) or (b) in Asoka Brāhmī or Kharoṣṭhī. 8

(ii) Translate any two of the above extracts, adding short explanatory notes and bringing out their precise historical bearings. 12

(iii) Rewrite the extract (c) in Pāli. 8

(iv) What light is thrown by the extract (c) on the Indian judicial system of the day ? 8

2. Write short explanatory and critical notes on any four of the following :— 16

(a) Rājā dasavasābhissito samto ayāya Sambodhiṃ.  
Tenaṃ dhammayātā.

(b) Nathi cā ṣe janapade yatā nathī ime nikāyā ānaptā Yoneshu.

(c) Dhammavaḍḍhi vaḍḍhitā duvehi yeva ākālehi : dhammaniya-mena cha nijhatiyā cha.

(d) Devāvutike hosāmi etāye athāye.

(e) Silāvigaḍḍhīkā kālāpitu silāthabhe cha usapāpīte.

(f) Iyaṃ ca sāvaṇe sāvāpīte vyūthena 256 (200 50 6).

3. What is in your opinion the right construction of the text of the Piprawah Vase inscription ? 16

4. Write geographical notes on the places and peoples mentioned in R. E. XIII. 16

5. How far can you regard P. E. VII as a mere resumé of the edicts previously published by Asoka ? 16

6. What information can you gather from your inscriptional texts regarding the popular cults of India ? 16

7. Draw up a picture of the vastness of Asoka's empire to-ether with its internal divisions and outlying frontages in the light of the data yielded by the inscriptions and legends of Asoka. 16

8. 'While Hinduism forms a natural social background, Buddhism represents in essence but a dynamic force of Hinduism.' 16

Develop this idea as far as you can with the aid of the main teachings and principles of Asoka's Dhamma.

(GROUP C)  
SEVENTH PAPER  
FIRST HALF

Examiner—DR. H. C. RAYCHAUDHURI, M.A., PH.D.

[Full marks—50]

The questions are of equal value.

Not more than THREE questions to be attempted

1. Comment on the following passages :—

(a) Sat kāvyā śrī virodhān budhagunīta guṇāḍḍhatāneva kṛtvā

(b) Sarva prithvī vijaya janitodaya vyāpta nikhilāvani-talām kīrtimītas-tridaśapati bhāvana gamanā vāpta lalita sukha vicāraṇāmāchakṣhāṇa iva bhuvo-bāhur ayamuchchṛitaḥ stambhaḥ.

(c) Jitamitī paritoshān mātāyam sāśranetrām hataripuriva Kṛishṇo Devakīnabhyūpetāḥ.

(d) Bhaktānurakto nṛviś-śhayuktaḥ  
Sarvopadbābhiścha viśuddhabuddhiḥ.

2. What light do the Gupta inscriptions throw on the relative position of Śaivism, Vaiṣṇavism, and Buddhism in the fourth and fifth centuries A. D. ?

3. What information do you gather from the inscriptions you have studied about—

(a) the extent of the Gupta Empire, and

(b) the mythological conceptions of the Brāhmagical Hindus and the Jains ?

4. Name some famous poets mentioned in the Gupta inscriptions and piece together the information about their personal history that may be gleaned from those records

5. Write notes on :—

Garutmadaṅka, Dīnāra, Svāmi Mahāsena, Goptṛi, Palāsini, Kakubha-grāma, Antardedi, and Uparika.

SECOND HALF

Examiner—PROF. BENIMADHAB BARUA, M.A., D.LIT.

The figures in the margin indicate full marks.

THREE questions are to be answered, including Question 1 which is compulsory.

1. Comment on any four of the following extracts, pointing out the context and precise historical bearing of each :—

18

(a) Dutiye ca vase acitayitā Sātakaṇiṃ pachimidisaṃ haya-gaja-nara-radha-bahulaṃ daṃḍaṃ paṭhāpayati.

(b) Paṃcamo ca dāni vase Namdarāja-tivasa-sata-oghāṭitaṃ Tanasuliya-vāṭā paṇḍiṃ nagaraṃ pavesayati

(c) Bhaṭārakā aṇṇatiyā ca gatosmiṃ varṇaratum Mālayehi rudhaṃ Utamabhādraṃ mocayitum ca Mālayā pranāden'eva apayātā.

(d) Rāṇo Vāsīṭhiputasa Sivi-Pulmāyisa savichare ekunavise 19... rājaraṇo Gotamiputasa Himavata-Meru-Madīra-pavata-sama-sārasa Asika-Asaka-Muḷaku Surāṭha-Kukur-Āparaṇṭa-Anupa-Vidabha Ākaravati-rājasa.

(e) Vase 42 Vesākhamaṣe rāṇo Kshaharātasa kshatrapasa Nahapānasa jāmātaraḥ Dinikaputrena Ushavaddātena saṃghasa cātudāsasa imaṃ leṇaṃ niyātitaṃ.

(f) *Govadhane amacasa Sāmakasa deyo rājāṇito raño Gotami-putasa Sātakaṇisa mahādeviya ca jīvasutāya rājamā-tuya vacanena.*

2. Write short explanatory and critical notes on any four of the following :—

16

- (a) *Tatiye Kalimgarājavamse purisayuge.*
- (b) *Māgadham ca rājānaṃ Bahasatimitaṃ.*
- (c) *Nikāyena Bhaddāyānīyehi.*
- (d) *Akshayanivāṇī prayuktā.*
- (e) *Rāma-Kesav-Ājuna Bhīmasena-tula-parākamasa.*

3. What are the chronological data yielded by the inscriptions of the reign of the Kushāna kings, and how far do these enable you to fix the date of Kanishka? 16

4. What light is thrown by the inscriptions of Khāravela and the Kahabarāta, Sātavāhana, and Kushāna kings on the development of the religious art and architecture of the Jains and Buddhists? 16

5. 'The warrior-like spirit of Khāravela and his bold undertaking of military campaigns all over India clearly prove that militarism was in full vigour in the country in spite of Aśoka's advocacy of the ideal of conquest by the Dhamma.' 16

Refute or justify this remark.

## EIGHTH PAPER

### FIRST HALF

Examiner—DR. P. C. BAGCHI, M.A., D.LITT.

[Full marks—50]

The questions are of equal value.

[Only THREE questions are to be answered.]

1. Discuss the importance of the Pali Buddhist literature as a source of the ancient geography of India.

2. Name and identify the principal places in Northern India that are associated with the life of the Buddha.

3. Discuss the importance of Gāndhāra as a centre of Buddhism.

4. How did the Chinese travellers define the boundaries of the different divisions of India? How far was their definition influenced by the study of the then current Buddhist literature?

5. Write notes on the following and bring out their importance in the history of Buddhism :—

*Mo-lo-kiu-cha, Kien-chi-pu-lo, Sāṅkāsya, Ayodhyā, Puṇḍravardhana.*

### SECOND HALF

Examiner—DR. B. C. LAW, M.A., PH.D.

[Full marks—50]

Write an essay on any one of the following subjects :—

- (a) Magnificence of Asoka's architectural achievements.
- (b) Asoka's part in the propagation of Buddhism.
- (c) Buddhist Councils.
- (d) Geographical data from the old Brahmi Inscriptions in the Udayagiri and Khandagiri caves.
- (e) State of civilisation at the time of the Imperial Guptas.

(GROUP D)

FIFTH PAPER

FIRST HALF

Examiner—DR. NALINAKSHA DATTA, M.A., PH.D., D.LITT.

[Full marks—50]

The questions are of equal value

Answer Question 1 and ANY TWO of the rest.

1. Translate into English any two of the following passages :—

(a) एवं प्रमुखैर्द्वादशभिर्भिक्षुसहस्रैः सार्द्धं द्वाविंशता च बोधिसत्त्वसहस्रैः सर्वैरेकजातिप्रतिबद्धैः सर्वबोधिसत्त्वपारमितानिर्जातैः सर्वबोधिसत्त्वाभिज्ञाविक्रीडितैः सर्वबोधिसत्त्वधारणीप्रतिभानप्रतिलब्धैः सर्वबोधिसत्त्वधारणीप्रतिलब्धैः सर्वबोधिसत्त्वप्रणिधानपरिपूर्णैः सर्वबोधिसत्त्वप्रतिसम्यङ्गतिङ्गतैः सर्वबोधिसत्त्वसमाधिविशिता-  
प्राप्तैः सर्वबोधिसत्त्वविशिताप्रतिलब्धैः सर्वबोधिसत्त्वक्षान्त्यवकीर्णैः सर्वबोधिसत्त्व-  
भूमिपरिपूर्णैः ।

(b) तस्मिन्महाविमाने सुखोपविष्टस्य द्वाविंशद्भूमिसहस्रप्रतिसंस्थिते वितर्दिनियुतोरणगवाक्षकूटागारप्रासादतलसमलंकृते उच्छिन्नतलध्वजपटाकरल-  
किङ्किनीजालवितानवितते मान्दारवमहामान्दारवपुष्पसंस्तरणसंस्तृते अप्सरसः  
कोटीनियुतशतसहस्रसंगीतिसंप्रचलिते अतिमुक्तकचम्पकपाटलकोविदारमुचिलिन्द-  
महामुचिलिन्दाशोकन्यग्रोधतिन्दुकसनकणिंकारकेशरसारलक्ष्मवृक्षोपशोभिते हेमजाल-  
संछन्ने सुखोपविष्टस्य तस्मिन्महाधर्मसांक्ष्ये प्रवृत्ते तेभ्यश्चतुरशीतिभ्यस्तूर्यसंगीति-  
सहस्रनिर्नादितेभ्यो बोधिसत्त्वस्य पूर्वशुभकर्मोपचयेनेमाः संबोदनागाथा निश्चरन्ति  
स्य ।

(c) जातस्य तस्य गुणसागरसागरस्य

ज्ञात्वा सुरेश्वरमरुद् ब्रूवते उदग्रः ।

यस्या सद्गुल्लं भ्रम्रवो बहुकल्पकोटया

हन्तेय तं ब्रजम पूजयितुं मुनीन्ब्रम् ॥

परिपूर्णद्वादशसहस्रं मरुद्विशुद्धा

मणिरत्नचूडसमलंकृत इर्यवन्नः ।

कपिलाङ्ग्यं पुरवरं समुपेत्य शीघ्रं

द्वारि स्थिता नरपतेः सुषिलम्बचूडाः ॥

ते द्वारपालमवदन् सुमनोजघोषाः

प्रतिवेद्यस्व नृपते भवनं प्रविश्य ।

दौवारिको वचनं श्रुत्वा गृहं प्रविष्टः

प्रहृष्टताञ्जलिपुटो नृपतिं वभाषे ॥



2. Explain fully, with reference to the context, any two of the following *ślokas* :—

- (a) भग्ना कुतीर्थिकगणा विपरीतरष्टिः  
 भवरागबन्धननिमग्नस्थिता भवाग्रे ।  
 हेतु प्रतीत्य भव शून्य शुणित्व धर्मा  
 सिंहस्य कोष्ठदुक्कणैव पलायिनास्ते ॥
- (b) यथा च ज्वलनः शान्तः सर्वा नद्यश्च विस्थिताः ।  
 सूक्ष्मं च कम्पते भूमिः भविता तत्त्वदर्शकः ॥
- (c) न अस्ति सर्वसत्त्वकायि भुक्तु यो जरेय तं  
 अन्यत्त भूरि बोधिसत्त्व ब्रह्मकल्पसंनिभे ।  
 अनेककल्प पुण्यतेज ओजविन्दुसंस्थितो  
 भुजित्व सत्त्व कायचित्त ज्ञानशुद्ध गच्छिषु ॥

3. Summarise the *Dharmālokaparivarta*, and show that there is in it a mixture of Hinayānic and Mahāyānic doctrines.

4. Show that the *Lalitavistara* is a production of the period of transition from Hinayāna to Mahāyāna.

5. (i) Comment on the characteristics of the language of the Gāthās of the *Lalitavistara*.

(ii) What is your opinion about the relation of Pāli to the language of the Gāthās ?

## SECOND HALF

Examiner—DR. AMARESWAR THAKUR, M.A., PH.D.

*The figures in the margin indicate full marks*

*Answer THREE questions, of which Question 5 must be one.*

1. "The Buddha-carita will tell us little new about Buddhism and its history, but it is full of information for those who are interested in the history of Sanskrit literature." Explain. 10
2. Write a clear note on the different versions of the Buddha-carita. 10  
 Name and classify Aśvaghoṣa's works.
3. Explain in Sanskrit or in Pāli either of the following *ślokas* :— 10

- (a) हतत्विस्रोऽन्याः शिथिलात्मबाहवः  
 स्त्रियो विषादेन विचेतना इव ।  
 न चुक्रुः शुर्नाशु जहुर्न शश्वसु  
 न चेतना उल्लिखिता इव स्थिताः ॥
- (b) अथ मेरुगुह्यं बभाषे  
 यदि नास्ति क्रम एव नास्ति वाच्यः ।  
 शरणाज्ज्वलनेन दह्यमाना-  
 बहि निमिक्कमिषु क्षमं ग्रहीतुम् ॥

4. Give the substance of Arāja's discourse to Siddhārtha. Why did it not appeal to the latter? 10

5. Translate into English any six of the following :— 30

(a) तस्मात् प्रमाणं न वयो न कालः

कश्चित् स्वचिच्छैः पश्यन्मुपैति लोके ।

राज्ञामृषीणाञ्च हितानि तानि

कृतानि पुत्सैरकृतानि पूर्वैः ॥

(b) तस्मिंस्तथा भूमिपतौ प्रवृत्ते भृत्याश्च पौराश्च तथैव चेह ।

शमात्मके चेतसि विप्रसङ्गे प्रयुक्तयोगस्य यथेन्द्रियाणि ॥

(c) स्थूलोदरः श्वासचलच्छरीरः स्रस्तांसबाहुः कृशपाण्डुगात्रः ।

अन्वेति वाचं कर्णं बुवाणः परं समाश्लिष्य नरः क एषः ॥

(d) ततः पुरोधानगतां जनश्रियं

निरीक्ष्य सायं प्रतिसंहतां पुनः ।

अनित्यतां सर्व्वगतां विचिन्तयन्

विवेश धिक्स्थं क्षितिपालकात्मजः ॥

(e) गगनं खगवद्गते च तस्मिन् नृवरः संजहृषे विसिस्मिये च ।

उपलभ्य ततश्च धर्मसंज्ञामभिनिर्व्याणविधौ मतिं चकार ॥

(f) ततस्तथा भर्त्तरि राज्यनिःस्पृहे

तपोवनं याति विवर्णवाससि ।

भुजौ समुक्षिप्य ततः स वाजिभृ-

श्रृशं विचुक्रोश पपात च क्षितौ ॥

(g) इत्येवमुक्ते स तपस्विमध्ये तपस्विमुख्येन मनीषिमुख्यः ।

भवप्रणाशाय कृतप्रतिज्ञः स्वं भावमन्तर्गतमाचचक्षे ॥

(h) अनाद्यमस्निग्धममिलकर्म मे

नृशंसं कृत्वा किमिहाद्य रोदिषि ।

नियच्छ वाष्पं भव तुष्टमानसो

न संवदत्यक्षु च तच्च कर्म ते ॥

(i) एवं च ते निश्चयमेतु बुद्धिर्द्वा विधितं विविधप्रचारम् ।

सन्तापहेतुनं सुतो न बन्धुरज्ञाननैमित्तिक एव तापः ॥

(j) ततस्तदानीं गजराजविक्रमः

पश्यन्नेतदुत्तमेन बोधितः ।

महासुनेरागतबोधिनिश्चयो

जगात् कालो भुजगोत्तमः स्तुतिम् ॥

## (GROUP D)

## SIXTH PAPER

Examiner—DR. NALINAKSHA DUTTA, M.A., PH.D., D.LITT.

[Full marks—100]

The questions are of equal value

Answer ANY SIX questions

1. State the reasons given in the *Vimśikā* to refute the arguments put forward to prove the existence of atoms (*paramāṇu*).

2. What is, according to Nāgārjuna, the proper interpretation of the doctrine of *Prātītya-samutpāda*? Support your answer by one or two arguments of Nāgārjuna.

3. Summarise the arguments put forward by Nāgārjuna against the *Vaiśāṅghikas*, the *Sautrāntikas*, and the *Yogācāras* to disprove their conceptions of *Nirvāṇa*.

4. (i) Explain the relation of *Gotras* to *Yānas*, according to the *Laṅkāvatāra*.

(ii) Is *Mahāyāna* the exact equivalent of *Bodhisattvayāna*? Did all the *Mahāyāna* schools agree to the principle that *Mahāyāna* was the unique vehicle of *Nirvāṇa*?

5. Explain fully the *Parikalpita*, *Paratantra*, and *Pariniṣpanna* truths of the *Yogācāras*.

Or,

Give the substance of the chapter, in the *Laṅkāvatāra*, on the eating of meat by the Buddhists, and explain the position of the early Buddhist *bhikṣus* concerning the use of meat.

6. Trace the evolution of the *Kāya* conceptions among the *Mahāyānists*.

7. (i) Ascertain the times of composition of the *Madhyamaka-Kārikā* and the *Laṅkāvatāra*.

(ii) What do you know of *Buddhapālita*, *Candrakīrti*, and *Maitreya-nātha*?

8. Explain any four of the following :—

(i) *Kleśāvaraṇa* and *Jñeyāvaraṇa*;

(ii) *Apratiṣṭhita Nirvāṇa*;

(iii) *Ālayavijñāna*;

(iv) *Bhūtakoti*;

(v) *Prat:samkhyā-nirodha* and *Apratisamkhyā-nirodha*;

(vi) *Triyāna*.

9. Translate into English any two of the following passages with explanatory notes :

(a) देशादिनियमः सिद्धः स्वप्नवत् प्रेतवत् पुनः ।

संतानानियमः सर्वैः पूयनद्यादिदर्शने ॥

स्वप्नोपघातवत् कृत्यक्रिया नरकवत् पुनः ।

सर्वं नरकपालादिदर्शने तैश्च बाधने ॥

(b) सिद्धार्थः शाक्यतनयो विष्णुर्ज्योत्सो महेश्वरः ।

एवमाद्यानि तीर्थानि निवृत्ते मे भविष्यति ॥

एवं मया श्रुताविज्याः शाक्यसिंहस्य देवता ।

इतिहासं पुरादृष्टं व्यासस्यैतद् भविष्यति ॥

- विष्णुर्महेश्वरश्चापि सृष्टित्वं देशयिष्यति ।  
 एवं मे निवृत्ते पश्चादेवमाद्यं भविष्यति ॥  
 माता च मे वसुमतिः पिता विप्रः प्रजापतिः ।  
 कात्यायनसगोत्रोऽहं नाम्ना वै विरजो जिनः ॥
- (c) अवाचऽनक्षराः सर्वशून्याः शान्तादिनिर्मलाः ।  
 य एवं जानति धर्मान् कुमारो बुद्ध सोध्यते ॥  
 तथागतो हि प्रतिबिम्बभूतः  
 कुशलस्य धर्मस्य अनास्रवस्य ।  
 नेवास्र तथता न तथागतोऽस्ति  
 बिम्बं च संदृश्यति सर्वलोके ॥

10. Explain fully any two of the following ślokas :—

- (a) चत्वारः प्रत्यया हेतुश्चालम्बनमनन्तरम् ।  
 तथैवाधिपतेयं च प्रत्ययो नास्ति पञ्चमः ॥
- (b) व्यवहारमनाश्रित्य परमार्थो न देश्यते ।  
 परमार्थमनागम्य निर्वाणं नाधिगम्यते ॥
- (c) एवं विज्ञानबीजोऽयं स्पन्दते दृष्टिगोचरे ।  
 बाला गृह्णन्ति जायन्तं तिमिरं तैमिरा यथा ॥
- (d) पञ्चानां मूलविज्ञाने यथाप्रत्ययमुद्भवः ।  
 विज्ञानानां सह न वा तरङ्गाणां यथाऽजले ॥

(GROUP D)

SEVENTH PAPER

Examiner—MR. SATKARI MUKHERJEE, M.A.

[Full marks—100]

The questions are of equal value

Answer ANY SIX questions

1. Fully elucidate the contrast between the *nirvikalpakajñāna* and the *savikalpakajñāna* according to the *Nyāyabindu*, and show why the latter is regarded as invalid.
2. Give a critical estimate of the definition of *Pratyakṣa* as proposed by Dharmakīrti in its relation to the definition of Dignāga. Is the adjective 'abhrānta' absolutely necessary?

3. Criticise the definition of the terms, 'Vaibhāṣika', 'Sautrāntika', 'Yogācāra', and 'Madhyamika' as given in the *Sarvadarśanasamgraha*. What do you think to be the proper definition of these terms?

4. Write a short essay on the conception of 'Manovijñāna' showing its place and value in the scheme of Dharmakīrti's epistemology.

5. Fully elucidate the significance of the following text of the *Nyāyabindu* : 'tad eva pratyakṣam jñānam pr. māṇaphalam, arthapratitirūpatvāt. arthasārūpyam asya pramāṇam tadoasād arthapratitisiddher iti.'

6. Evaluate the definition of reality as *arthakriyāsāmarthyā* and show how this definition leads by a logical necessity to the conception of momentariness of all existence in the light of what you have read about it in the *Sarvadarśanasamgraha*.

7. Mark the contrast between the *Nyāyabindu* and the orthodox *Nyāya* so far as the conception of the validity and constitution of *anumāna* are concerned.

8. Comment on the text quoted in the *Sarvadarśanasamgraha* : 'utpādād vā tathāgatānām anutpādād vā sthitai vai 'ṣṭ dharmānām dharmatā.'

9. Write notes on some of the recent publications on Dignāga's logic.

Or,

Give a short account of the development of the school of Dignāga's logic.

10. Comment on the line of Dharmakīrti quoted in the *Sarvadarśanasamgraha* and fully bring out its philosophical implications : 'sahopalambhaniyamād abhedo nīlataddhiyoḥ.'

### (GROUP D)

### EIGHTH PAPER

### FIRST HALF

Examiner—DR. N. P. CHAKRABARTI, M.A., PH.D.

*The figures in the margin indicate full marks*

1. (a) Disjoin the *sandhi* in five of the following :—

5

कुत आगतः, पुना रोगी, वाग्धि, यथर्षिः, नायकः, and तांष्ट्रान् ।

(b) Decline any five of the following bases :—

5

एतद्, accusative singular or dual in neuter; युष्मद्, accusative or dative singular; सुपाद्, nominative plural; दिम्, locative plural; ऋग्भिस्, instrumental plural; and वन्, accusative plural.

(c) Conjugate any five :—

5

कृत् or लिट्, present, third person singular; या or वध्, imperfect, first person plural; स्यु or व, perfect, third person plural; नी or दा, aorist, third person singular; क्री or कृ, imperfect, second person singular.

(d) Name and expound the *samāsa* in any four :—

6

कृताकृतम्, गृहागतः, युधिष्ठिरः, राजान्तरम्, कापुङ्गवः, शिखोच्चनः, and सुसङ्गमम् ।

(e) Account for the case-ending in *five* of the words underlined :— 5

अक्षौर्दीप्यति ; देवदत्ताय रोचते मोदकः ; ग्राममध्यास्ते ; मातुः  
स्मरति ; दैत्यान् घातुको हरिः ; रजकस्य वस्त्रं ददाति ; गोषु दुष्टमानासु  
गतः ।

(f) Explain, with examples, at least *four* different uses of the Potential in Sanskrit. 6

(g) Justify the use of परस्मैपद or आत्मनेपद in *four* of the following sentences :— 4

साधु विक्रमते वाजी ; नदीकुलं व्याददाति ; शास्त्रे नयते ; शतं  
विनयते ; अध्ययनात् पराजयते ; पीठादुत्तिष्ठति ।

(h) Derive and give the derivative meaning of *any four* :— 4

मेधाविन्, जनता, गन्धं, जिघत्सति, देदीप्यते, and वियासुः ।

(i) Re-write after correcting all the errors in the following :— 10

वानरराजा सुग्रीवो सुगृहीतनामस्य दाशरथिनः मित्रोऽभूत् । रामस्य  
साहाय्येन समरे जयं लब्ध्वा श्रीमिव सीतां सह अयोध्यामप्रत्यागच्छत् ।

## SECOND HALF

### (ESSAY)

Examiner—MR. SAILENDRANATH MITRA, M.A.

[Full marks—50]

Write an essay on one of the following subjects :—

(i) The relation between Hinayāna and Mahāyāna.

(ii) The difference, if any, between *Sūnyatā* of Nāgārjuna and *Brahman* of Saṅkara.

(iii) The *parikalpita*, *paratantra*, and *pariniṣpanna* aspects of things according to the *Yogācāra* school.

(iv) The conceptions of *Tathatā* according to the four schools : Theravāda, Sarvāstivāda, Mādhyamika, and Yogācāra.

(v) The line of argument followed by Nāgārjuna in his attempt to establish his theses.

## ARABIC

### FIRST PAPER

#### FIRST HALF

Examiner—MAULVI S. MUHAMMAD HAIDAR

*The figures in the margin indicate full marks*

1. Write in Arabic a short biography of Abu Nawas. 10

2. Translate into English :— 20

امكنت عازلي من صمت اباؤ (a)

ما زاده النبی شیخا غیر اغراء

أين التورع من قلب يهيمهم الى  
حانات قطر بل و العود و النساء  
و صوت فتانة التغريد ناظرة  
بعين ظبي يريد الماء حواء  
جرت ذبول الثياب البيض حين مشت  
كالشمس مسبلة اذبال لاء لاء  
و قرع ناقوس ديرى على شرف  
مسيح فى سواد الليل دعاء

(b) رادى استزدتك فوق ما بى  
من البلوى لا عزك المزيـد  
و لو عرضت على الموتى حياتى  
بعيش مثل عيشى لم يريدوا  
تقول غداة البين احدى نسايم  
لى الكبد الحرى فسر لك الصبر  
و قد خضبتها عبرة فادمعها  
على خدها خد و فى نحرها نحر  
لها بشر صاب و عين مريضة  
و احسن ايماء باحسن معصم

8. Describe the contention of Muslim with Abu Nawas about the two following lines and also the remarks of Abufuzlah Muhallil :- 10

ذكر الصبوح بسهرة فارقاها  
و امله ديك الصباح صياحا  
عامي الشباب فراح غير مفند  
و اقام بين عزيمة و تجلد

4. Either, 10

(a) Write how it was that the productions of other poets were ascribed to Abu Nawas, while some of his poems were partially or entirely lost.

Or,

(b) Discuss the opinions of any two great poets regarding Abu Nawas. 10

## SECOND HALF.

*Examiner—DR. A. SUHRAWARDY, M.A., PH.D., M.L.A.**The figures in the margin indicate full marks*

1. Translate into English :—

15

و في العتّى احوي بنفض المردشادن  
 مظاهر سمطى لوء لوء و زبرجد  
 و اني لامضى الهم حين احتضاره  
 بعوجاء مز قال تروح و تغتدي  
 اذا القوم قالوا من فتى خلت اننى  
 عنيت فلم اكسل و لم اتبلد  
 احلت عليها بالقطيع فاجذمت  
 و قد خب ال الامعز المتوقد

2. Write in your own Arabic the morals contained in the following lines :—

15

رايت المنايا خبط عشواء من تصب  
 تمته و من تغطى يعمر فيهمرم  
 و من لا يصانع في امور كثيرة  
 يضرس بانياب و يوطا بمنسم  
 و من يك ذا فضل فينجل بفضله  
 على قومه يستغن عنه و يذمم  
 و من يجعل المعروف في غير اهله  
 يكمن حمده ذمما عليه و يندم  
 و من هاب اسباب المنايا يذلله  
 و ان يسرق اسباب السماء بسلم  
 و كائن ترى من صامت لك معجب  
 زيادته او نقصه في التعلم

3. elucidate the meaning of the following lines :—

10

متى ننقل الى قوم رحانا  
 يكرنوا في اللقاء لها طعينا



و انا نورد الرايات بيضا  
 و نمدرهن حمرا قد ررينا  
 متى نعقد قرينتا بهبل  
 تجذ العبل او تقصل: القرينا  
 يدهدون الرؤس كما يدهدي  
 خزا درة بابطعها الكرينا

4. Briefly describe the آيات referred to in :—

من لنا عنده من الخير آيات  
 ثلاث فى كلهن القضاء

5. Write notes on any three of the following :—

(a) 'ام اياس' (b) 'بليّه' (c) 'ارمى' (d) 'ضرب العير'

## SECOND PAPER

### FIRST HALF

Examiner—MAULVI A. HADI

The figures in the margin indicate full marks

Attempt the FIRST question and ANY TWO of the rest

1. Translate into English with notes where necessary :—

18

حدثنا محمد بن جرير قال حدثنا محمد بن  
 عبيد المعاربى قال حدثنا عبد الله بن المبارك عن عكرمة  
 بن عمار قال حدثنى سماك العنقى قال سمعت ابن  
 عباس يقول حدثنى عمر بن الخطاب قال لما كان يوم  
 بدر و نظر رسول الله صلى الله عليه وسلم الى المشركين  
 و عدتهم و الى اصحابه وهم نيف على ثلثمائة استقبل  
 الكعبة و جعل يدعو و يقول اللهم الخبرني ما وعدتنى  
 اللهم ان تهلك هذه العصابة من اهل الاسلام لا تعبد  
 فى الارض فلم يزل كذلك حتى سقط رداؤه فاختد ابو بكر

فوضع رداءه عليه ثم التزمه من وراءه فقال كفاك يا  
نبي الله بابي انت وامي منا شدتك لربك سينجز  
لك ما وعدك -

2. Give the purport of the following in English or Arabic :—

16

و قد روي عن الاعمش ان علي بن ابي طالب  
رضي الله تعالى عنه قال على المنبر بالكوفة و ذكر  
ثقيفا لقد هممت ان اضع على ثقيف الجزية لان ثقيفا  
كان عبد الصالح نبي الله عليه السلام وانه سرحه الى عامل  
له على الصدقة فبعث العامل معه بها فهرب واستوطن  
الحرم و ان ارلى الناس بصالح محمد صلى الله عليهما  
و سلم و اني اشهدكم اني قد رددتهم الى الرق قال  
و بلغنا ان ابن عباس قال و ذكر عنده ثقيف فقال هو  
قسي ابن منبه و كان عبد لامرأة صالح نبي الله صلى الله  
عليه و سلم و هي الهيجمانة بذت سعد فوهبته لصالح  
و انه سرحه الى عامل له على الصدقة \*

3. Render the following verses into prose order and explain fully :—

16

فهم ملوك مالم يروك فان	و انا همو منك منزل خمدرا
تعرورهم رعدة لديك كما	قفقف تحت الدجنة الصرد
لا خوف ظلم و لا قلا خلق	الاجالا كساكه الصمد
وانت غمر الندى اذا هبط	الززار ارضا تحملها حمدرا
فهم رفاق فرقة صدرت	عنك يغنم و رفقة ترد
ان حال دهر بهم فانك لا	تنفك عن حالك التي عهدرا

4. What do you know of صاحب الاغاني ? Give a short account of him in Arabic or English.

16

5. Explain the following in Arabic :—

16

ثم قال رسول الله صلى الله عليه و سلم ابشروا على  
ايها الناس و انما يريد الانصار ذلك انهم كانوا عدوا للناس  
و انهم حين بايعوا بالعقبة قالوا يا رسول الله انا براء من

ذمائمك حتى تسير الى دارنا فاذا وصلت فانت في  
 ذمامنا نمنعك مما نمنع منه انفسنا و ابنائنا و نساءنا  
 فكان رسول الله صلى الله عليه وسلم يتخوف ان لا تكون  
 الانصار تربي عليها نصرته الا ممن دهمه بالمدينة عدوه  
 و ان ليس عليهم ان يسيرهم الى عذر في غير بلادهم  
 فلما قال ذلك رسول الله صلى الله عليه وسلم قال له سعد  
 بن معاذ و الله لكانك تريدنا يا رسول الله قال اجل  
 قال فقد امنابك يا رسول الله و صدقنا و شهدنا ان  
 ما جئت به هو الحق \*

## SECOND HALF

*Examiner*—MAULVI S. MUHAMMAD HAIDAR

[Full marks—50]

*The questions are of equal value*

1. Translate into English :—

لا يغنى ان عرب البادية يقربون البعد لاعتبادهم  
 على قطع المسافات الشاقة و لانهم لا يستعملون الساعات  
 و لا يعرفون حساب الارقات لذلك تربي احدهم يقول  
 لك ما هي البيئر الفلانية و يشير باصبعه الى جهتها ان  
 بيدك و بينها ربع ساعة او ساعة هيهات هيهات فاذا  
 بيدك و بينها مسافة يوم ادر يومين و اذا قال لك  
 قد وصلتها فتسير الى آخر النهار و لا تبلغها \*

2. Write a biographical note on Hamadani, in Arabic.

3. Translate into English :—

مثل الانسان في الاحسان كمثل الاشجار في الثمار  
 سبيله اذا اتى بالحسنة ان يرفه الى السنة و انا كما  
 ذكرت لا املك عضوين من جسدي و هما فوايدي و  
 يدي اما الفواد فيعاق بالفود و اما اليد فتزول بالجد  
 لكن هذا الخلق النفيس ليس يساعده الكيس و هذا

الطبع الكريم ليس تجمله الغريم و لا قرابة بين الذهب  
و الادب \*

4. Re-write in prose order, adding explanatory notes where necessary :—

طرباً لقد رق الظلا م ورق انفاس الصباح  
رسري الى القلب العليل عليل القاس الرماح  
و مليحة ترنو بئر جسة و تبسم عن اقحاح  
قامت وقد برد العلي تميمس في ثنى الوشاح  
تشدد و غنائها برد علي كبد اقتراح

5. Expand the meanings of any two of the following :—

- (a) العذق لا يزيد في الرزق \*  
(b) ان بعد الكدر صفوا و بعد المطر صهوا \*  
(c) ارخص ما يكون النفط اذا غلا و اسفل ما يكون  
الا ريب اذا علا \*

### THIRD PAPER

#### FIRST HALF

Examiner—MAULVI ABU MUSA AHMADUL HAQ

[Full marks—50]

Translate into Arabic any two of the following passages :—

(a) Tahir cleared the mountainous tract, seized Qazwin and reached Hulwán, which he made his headquarters. From here he was sent to Ahwáz, leaving Harthama in the north, Mámún now assumed the title of Ameerul-Muminin, and the whole of Persia accepted him as Caliph. Fazl b. Sahl was invested with supreme control throughout the principality, from Tibet to Hamadan, from the Indian Ocean to the Caspian Sea. He combined the offices of minister of war with that of chancellor of the exchequer.

(b) Soon after, the governor of Khorásán rebelled, and al-Manşur sent Ibn Khozeima, a general of note, to put the outbreak down, and with him his own son and heir, Al-Mehdi, now about twenty years of age. On their approach, the rebel was attacked by his own people, who, mounting him backward on an ass, sent him thus to the Caliph. Both he and his followers were treated with horrid cruelty, and tortured till they gave up all they possessed. The hands and feet of the rebel governor were cut off, he was then beheaded.

(c) Religion had so little influence on the lives of the Pre-Islamic Arabs that we cannot expect to find much trace of it in their poetry. They believed

vaguely in a supreme God, Allah, and more definitely in his three daughters—al-Lat, Manat, and al-'Uzza—who were venerated all over Arabia and whose intercession was graciously accepted by Allah. There were also numerous idols enjoying high favour while they continued to bring good luck to their worshippers.

## SECOND HALF

Examiner—PROF. M. SHAFI, M.A.

[Full marks—50]

Translate into English ANY THREE of the following passages :—

(1) قال ابو محمد لما فرغ المعتم من بناء قصره بالميدان جلس فيه و جمع الناس من اهله و اصحابه و امر ان يلبس الناس كلهم الديباج و جعل سريرة في الايوان المنقوش بالفسا فسا الذى كان في صدره صورة العنقاء فجلس علي سرير مرصع بانواع الجواهر و جعل علي رأسه التاج الذى فى الدرة اليتيمة فما رأى الناس احسن من ذلك اليوم فاستاذنه اسحاق بن ابراهيم النشيد فادن له فانشد شعر اما سمع الناس احسن منه في صفته و صفة المجلس الا ان اذق اول تشبيب بالديار القديمة و بقية آثارها فكان اول بيت منها - يا دار غيرك البلي فمعاك يا لمت شعري ما الذي ابلاك فتطير المعتم منها و تغامزن الناس ، قال فاقمنا يومنا هذا و انصرفنا فما عاد منا اثنان الى ذلك المجلس و خرج المعتم الى سر من رأي و ضرب القصر \*

(2) و صارت بغداد فى عهد الرشيد و ابنه المأمون منبعاً للحضارة و مشرقاً للمعارف و لا نزيد عصر العباسيين و صفاد احضارهم تعريفاً بغير قولنا ان اوربا كانت علي عهدهم تتخبط كلها في غيابة الغراية و الضلالة و تهيم في نيا في الترحش و الجهالة ثم غير القوم ما بانفسهم فقير الله ما بهم و تمزق هذا الملك الاسلامي الفخيم و تشتت شمل هذه الدولة الهائلة و اصبحت الخلافة الاسلامية مثقلة فكادت ازلها في العراق و هي العباسية و مركزها بغداد و الثانية في مصر و هي الفاطمية و

مقرها القاهرة و الثالثة في الاندلس و هي الاموية و عاصمتها قرطبة من اعمال اسبانيان الآن \*

(3) و للتذليل في الكلام موقع جليل و مكان شريف خطير لان البعني يزداد انشراحا و المقصد اتضاها و هو اعادة الالفاظ المترادفة على المعني بعينه حتي يظهر لمن لم يفهمه و يتوكد عند من فهمه و هو ضد الاشارة و التعريف ، و ينبغي ان يستعمل في المواطن الجامعة و المواقف الحافلة لان تلك المواطن تجمع البطي الفهم و البعيد الذهن و الثاقب القريحة و الجيد الخاطر فان تكررت الالفاظ على المعنى الواحد توكد عند الذهن اللقن و صم للكليل البليد و مثاله من القرآن و ما جعلنا لبشر من قبلك الخلد ائان مت فهم الخالدون \*

(4) كيف النُزوع عن الصبا و الكس

قئس ذا لنا يا عاذلي بقياس  
و اذا عدتُ سنى كم هي لم اجد  
للشيب عذرا في النزول براسي  
قالوا كبرت فقلت ما كبرت يدي  
عن ان تسير الى فمي بالكس  
و كان شاربها لفرط شعاعها  
باليل يكترع في سنا مقباس  
فلذا نزعتم عن الغواية فليكن  
لله ذاك النزع لا للماس  
و اذا اردتُ مديم قزم لم تمن  
في مدحهم فامدح بنى العباس

(5) هو عمر بن الخطاب بن نفيل بن عبد العزي و كنيته

ابو حفص و يلقب بالفاروق و هو ارسل من سمي بامير المومنين و كان اعسر يسر (يعمل بكنتي يديه) طويلا اصلع و لونه شديد السمرة . ولد رضى الله عنه سنة اربعين قبل الهجرة و كان

فى صغره یرعى الغنم لابیہ ثم اشتغل بالتجارة ، سافر جملة  
مرات فى الجاهلیة الى الشام و غیرها فى تجارتہ ار سفارتہ  
لقومة و کان شجاعا مہیبا بعید النظر فى الاشیاء مشهورا  
بالصدق و الامانة و الشهامة الادبیة شديدا فى قوله و عمله  
و کان فى اول الاسلام من اشد الناس على رسول الله  
صلی الله علیه و سلم \*

#### FOURTH PAPER

##### FIRST HALF

*Examiner*—DR. AZIMUDDIN AHMAD

[Full marks—50]

*The questions are of equal value*

*Answer ANY FOUR questions*

1. Give in your own words some glimpses of the position and influence of women in Pre-Islamic society.
2. Trace the origins of Arabian poetry and describe its forms, contents, and general features.
3. 'In the fifth century A.H. the ogma of the unattainable perfection of the heathen poets may be regarded as utterly demolished.' Refute or justify the above-mentioned remark.
4. Trace the origin and growth of rhymed prose in Arabic literature.
5. Discuss at some length the following remark :—  
'Ghazālī's search for religious truth exercised a profound and momentous influence upon the future history of Muhammadan thought.'
6. Write notes on :—

(a) اخوان الصفا , (b) معجم الادبا , (c) الشعوبية , and  
(d) ابن رشد .

##### SECOND HALF

*Examiner*—KHAN BAHADUR SHAMSUL-ULAMA HIDAYET HOSSAIN

[Full marks—50]

*The questions are of equal value*

*Answer ANY THREE of the following*

1. Give the chief characteristics of the poetry of the Spanish Arabs.
2. Who was Ibn Khaldun ? What is his contribution to Islamic History ? Discuss the importance of his *Muqaddama*.
3. Discuss the influence of the Arabs on the Spaniards.
4. Give a brief account of the contribution of the Persians to Arabic literature.
5. Write short notes on :—

البیرونى - نغم الطیب - یقمة الدهر \*

## FIFTH PAPER

## FIRST HALF

Examiner—DR. M. Z. SIDDIQUI, M.A., PH.D.

[Full marks—50]

The questions are of equal value

1. ،، الاسم مادل على معنى فى نفسه دلالة مجردة عن  
الاقتران و له خصائص“

(a) Explain the above passage fully.

(b) Describe the properties (خصائص) of اسم and illustrate them with examples.

2. (a) Translate into English, adding explanatory notes where necessary :—

قد يتناول الاسم بواحد من الامة المسماة به ، فلذلك  
من التناول يعرجى مجرى رجل و فرس فيجترء على اضافته  
و ادخال اللام عليه - قالوا مضر الحمراء ، و ربعة الفرس  
و انمار الشاة - و قال -

علا زهدنا يوم النقاراس زيدكم بابيض ماضى الشفرتين يمان  
و قال ابو النجم :—

فاعد ام العمر من اسيرها حراس ابواب على قصورها  
و قال الاخر :—

رايت الوليد بن اليزيد مباركا شديدا باحناء الخلافة كاهله  
و قال الاحطل :—

و قد كان منهم حاجب و ابن امه ابو جندل و الزيد زيد المعارك  
و عن ابى العباس اذا ذكر الرجل جماعة اسم كل واحد  
منهم زيد قيل له فما بين الزيد الاول و الزيد الاخر وهذا  
الزيد اشرف من ذلك الزيد و هو قليل \*

(b) Explain the points of illustration in the quotations in the above passage.

8. Describe معرب اسم and its different kinds mentioned in your text. State their grammatical peculiarities, and the difference of opinion among the grammarians about them.



4. (a) Translate into English, adding notes where necessary:—

و المنقول على ستة انواع :—

منقول عن اسم عين كثور و اسد ، و منقول عن اسم  
معنى كفضل و اياس ، و منقول عن صفة كحاتم و نائلة -  
و منقول عن فعل اما ماض كشم و كعسب و اما مضارع  
كتغلب و يشكر و اما امر كاصمت في قول الراعي :—  
اشلى سلوقية باتت و بات بها بروحش اصمت في اصلاها ارد  
و ، اطرقا ، في قول الهذلي :—  
على اطرقا باليات الخيام الا الثمام و الا العصى - و  
منقول عن صر كبيتة و هو نيز عبد الله بن الحارث بن  
نوفل ، و منقول عن مركب و قد ذكرناه \*

(b) Explain the grammatical problem described in the above passage..

#### SECOND HALF

Examiner—MAULVI A. HADI

[Full marks—50]

The questions are of equal value

Answer ANY FOUR questions

1. بينوا اقسام الحقيقة العقلية مفصلاً مع الامثلة \*
2. شرحوا شرحاً واضحاً حذف المسند اليه مع الامثلة  
و لما قيل بالمسند اليه حذفه و في المسند " تركه "
3. بينوا الاستغراق الحقيقي و العرفي مع الامثلة \*
4. ما الاختلاف في قوله الشاعر يزيدك وجهه حسناً -  
اذا ما زدتَه نظراً بين الشيخ عبد القاهر و الامام فخر الدين  
الرازي و صاحب المفتاح \*
5. بينوا بالعربية قول الضرزدق - مع ما فيه :—  
" و ما مثله في الناس الا مملكا - ابراهمه حتى ابوه يقاربه " \*

## SIXTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner—MAULANA ABU MUSA AMADUL HUQ*

## الكشاف

*Answer ANY FOUR of the following*

1 ترجموا بالانكليزية: —  
 اذ قالت امرأة عمران رب انى نذرت لك مافى بطنى  
 محررا فتقبل منى انك انت السميع العليم فلما رضعها  
 قالت رب انى رضعها انثى و الله اعلم بما رضعتم و  
 ليس الذكر الا انثى و انى سميتها مريم و انى اعينها بك و  
 نريتها من الشيطان الرجيم فتقبلها ربها بقبول حسن و انبتنا  
 نباتا حسنا و كفلها زكريا كلما دخل عليها زكريا المحراب وجد  
 عندها رزقا قال يرمي انى لك هذا قالت هو من عند الله  
 ان الله يرزق من يشاء بغير حساب

2 فسروا الايات الاتية بالعربية كما فسرناها الزمخشري  
 فى الكشاف: —

و اذ اخذ الله ميثاق النبيين لما اتيتكم من كتب و حكمة  
 ثم جاءكم رسول مصدق لما معكم لتؤمنن به و لتنصرنه قال  
 ءاقررتم و اخذتم على ذلكم اصرى قالوا اقررنا قال فاشهدوا و  
 انا معكم من الشاهدين فمن تولى بعد ذلك فاولئك هم  
 الفسقون -

3 لم دخلت الفاء فى خبر ان فى قوله ( ان الذين )  
 يكفرون بايت الله و يقتلون النبيين بغير حق و يقتلون  
 الذين يأمرون بالقسط من الناس فبشرهم بعذاب اليم -

4 شرحوا معانى الاشعار التالية تشريحا وانيا: —

( شعر )

و يادى الى نسوة عطل و شعنا مراضيع مثل السعالى

(شعر)

و شارب مربع بالكس نادمنى لا بالصور و لا فيها بشار  
 كيف شبه عيسى بآدم فى قوله ( ان مثل عيسى  
 عند الله كمثل آدم ) و قد وجد هو بغير اب و وجد آدم  
 بغير اب و ام -  
 5

## SECOND HALF

Examiner—PROF. M. SHAFI, M.A.

Answer ANY FOUR of the following questions

1. Translate into English, adding necessary notes :—

(a) عن ابى سعيد الخدرى عن النبى صلى الله عليه و سلم قال اياكم و الجلوس بالطرقات فقالوا يا رسول الله مالنا من مجالسنا بعد نتحدث فيها قال فاذا ايتم الا المجلس فاعطوا الطريق حقه قالوا و ما حق الطريق يا رسول الله قال غش البصر و كف الاذى و رد السلام و الامر بالمعروف و النهى عن المنكر -

(b) عن ابى هريرة ان رسول الله صلى الله عليه و سلم قال ثلث منجيات و ثلث مهلكات فاما المنجيات فتقوى الله فى السر و العلانية و القول بالحق فى الرضا و السخط و القصد فى الغنى و الفقر و اما المهلكات فهوى متع و شهوة مطامع و امحباب المرء بنفسه و هى اشد هن -

(c) عن ابى هريرة عن النبى صلى الله عليه و سلم قال كانت بنو اسرائيل تسوسهم الانبياء كلما هلك نبى خلفه نبى و انه لا نبى بعدى و سيكون خلفاء فيكثررون قالوا فما تأمرنا قال فوا بيعة الاول فالاول اعطوهم حقهم فان الله عما استرعاهم -

2. Explain fully in English : -

(a) من عايشة قالت قال رسول الله صلى الله عليه و سلم لا تهوز شهادة خائن و لا خائنة و لا مجلود حدا و لا ذنى غمر

على اخيه و لا ظلمين فى رداء و قرابة و لا القانع مع اهل البيت -

(b) عن عبادة بن الصامت قال بايعنا رسول الله صلى الله عليه و سلم على السمع و الطاعة فى العسر و اليسر و المنشط و المكروه و على اثرة علينا و على ان لا نفازع الامر اهله و على ان نقول بالحق اينما كنا لا نخاف فى الله لومة لائم -

(c) عن عمر بن الخطاب قال قال رسول الله صلى الله عليه و سلم انه تصيب امتى فى آخر الزمان من سلطانهم شدائد لا ينجز منه الا رجل عرف دين الله فجاهد عليه بلسانه و يده و قلبه فذلك الذى سبقت له السوابق و رجل عرف دين الله فصدق به و رجل عرف دين الله فسكت عليه فان راى من يعمل الخير حبه عليه و ان راى من يعمل بباطل ابغضه عليه فذلك ينجز على ابطانه كله -

8. Explain in Arabic :-

(a) عن ابى سعيد الخدرى عن رسول الله صلى الله عليه و سلم قال من راى منكم منكرا فليغيره بيده فان لم يستطع فبلسانه فان لم يستطع فبقلبه و ذلك اضعف الايمان -

(b) عن ابى موسى قال قال رسول الله صلى الله عليه و سلم مثل المجلس الصالح و السوء كعامل المسك و نانم الكير فعامل المسك اما ان يحذيك و اما ان تبتاع منه و اما تجد منه ريحا طيبة و نانم الكير اما ان يحرق ثيابك و اما ان تجد منه ريحا خبيثة -

(c) عن ابى هريرة قال قال رسول الله صلى الله عليه و سلم تعلموا من انسابكم ما تصلون به ارحامكم فان صلة الرحم محبة فى الهل مثرة فى المال منسأة فى الاثر -

(d) عن عمر بن الخطاب انه كان اذا بعى عماله شرط عليهم ان لا تركبوا برذونا و لا تاكلوا نقيآ و لا تلبسوا رقيقا و لا

تَغْلِقُوا ابوابكم دون حوائج الناس فان فعلتم شيئا من ذلك  
نقد حلت بكم العقوبة ثم يشيعهم -

4. The Prophet spoke several times in parables. Give the gist of some of his parables.

Or,

Give some anecdotes from the باب المزاح

5. Re-write with vowel-points :—

عن الطفيل بن ابي بن كعب انه كان ياتي ابن عمر  
فيغدر معه الى السوق قال فاذا غدونا الى السوق لم يمر  
عبد الله بن عمر على سقايا ولا على صاحب بيعة ولا  
مسكين ولا على احد الا سلم عليه قال الطفيل فجلت عبد  
الله بن عمر يوما فاستتبعتني السوق فقلت له وما تصنع في  
السوق وانت لا تقف على البيع ولا تسأل عن السلع ولا  
تسوم بها ولا تجلس في مجلس السوق فاجلس بهذا ههنا  
نتحدث قال فقال لي عبد الله بن عمر يا ابا بطن قال وكان  
الطفيل ذا بطن انما نفدر من اجل السلام نسلم على من  
نقيناه -

### SEVENTH PAPER

*The questions are of equal value*

*Answer ANY THREE questions from EACH half*

#### FIRST HALF

*Examiner—DR. A. AHMAD*

1. Compare 'Umar I and 'Umar II as Caliphs.
2. Discuss at some length the political achievements of the Barāmika.
3. Whom do you consider the greatest of the Umayyad rulers, and why?
4. Give a short account of the system of government under the early 'Abbasids.
5. Trace the growth of political events which led to the establishment of the Fatimids and the Seljūqs.

#### SECOND HALF

*Examiner—KHAN BAHADUR SHAMSUL-ULAMA HIDAYET HOSSAIN*

1. 'The Moors organised that wonderful Kingdom of Cordova which was a marvel of the middle ages, and which, when all Europe was plunged in

barbaric ignorance and strife, alone held the torch of learning and civilisation bright and shining before the Western world.' Discuss.

2. Trace the career of Abdur Rahman III, and give an estimate of his character and achievements.

3. Discuss the causes that led to the downfall of the Mughal dynasty in India.

4. Write notes on :—

The Almoravides ; the Kingdom of Granada ; the Aghlabides.

## EIGHTH PAPER

(ESSAY)

Examiner— { DR. A. SUHRAWARDY, M.A., PH.D., M.L.A.  
{ PROF. M. Z. SIDDIQUI, M.A. PH.D.

*The figure in the margin indicates full marks*

Write an essay on any one of the following :—

100

(a) إذا المرو لم يدنس من اللوم عرضه - فاي رداء يرتديه جميل -

(b) Development of science and literature under the Muslims.

(c) Lessons in the Islamic history, for the Muslims.

(d) The growth and development of Art and Architecture under the Muslims

## PERSIAN

### FIRST PAPER

*The figures in the margin indicate full marks*

#### FIRST HALF

Examiner—AGA MUHAMMAD KAZIM SHIRAZI

1. اشعار ذیل را بعبارت فارسی ساده معنی کنید 14

و اشارات و تلمیحاتیکه شاعر در آن بکار برده بیان نمائید :

گرت باید که شسته گردد زه

ارلا پُستین بگازر ده

پوستین باز کن که تا در شاه

پوستین در بسی ست بدر راه

بنخستین قدم که زد آدم  
 پوستینش درید گرگ ستم  
 نه چو قابیل تشنه شد بجفا  
 داد هابیل پوستین بگنا  
 نه چو ادريس پوستین بگند  
 در فردوس را ندیده به بند  
 چون خلیل از ستاره و مه و خور  
 پوستینها درید بی غم خور  
 شب او همچو روز روشن شد  
 نار نمرود باغ و گلشن شد

2. از انتخابات ذیل فقط دو قای آنرا بفارسی تفسیر نمائید بقسمیکه مطلب ظاهر گردد : —

86

(a) گرچه ذات بعقل فرزانه است  
 عشق مگذار کوهم از خانه است  
 زیرکی دیو و عاشقی آدم  
 این بمان تا بدان رسی در دم  
 عقل عزم احاطت وی کرد  
 غیرت عشق پای او پی کرد  
 قدم عقل نقد حالی جوی  
 شعله عشق لا ابالی گوی  
 (b) عقل و نفس و طبیعت از پی زیست  
 همه در جنب عشق دانی چیست  
 نفس نقشی و عقل نقشی  
 طبع گردی و عشق فراشی  
 عقل چون نقش بست نفس سترد  
 عشق چون روی داد طبع بمرد

در طریقت سر و کلاه مدار  
 در بداری چون شمع‌دار از نار  
 (c) این نه از نام تو ختن باشد  
 که نیازی فروختن باشد  
 قدرتش را به چشم عجز مبین  
 خواجه آزاد کن مباح جنین  
 تا بخود قائمی پیوش و بخور  
 در بدر قائمی مدوز و مدور  
 بی تودل مسجد است و با ترک نشسته  
 با تودل دروخ است و بی تو بهشت

10 در عبارت فارسی خود بیان نمائید که حکیم سنائی  
 عشق را چه طور تفسیر کرده و حصول آن را بر چه قرار داده  
 و حکایتی از حکایات را که بطریق تمثیل درین باب ایراد کرده  
 بنویسید.

8 خلاصه مطلب یکی از در انتخاب ذیل را در  
 فارسی ساده بیان فرمائید : —

(a) بر سر شاه راه هیچ کسی  
 بررسی در خود و در نرسی  
 آیتسی کرد کونی از صونی  
 عشق و رای قریشی و کونی  
 صونی و عشق و در حدیث هنوز  
 سلب و ایجاب و لا یجوز و یجوز  
 صوفیان دستها بر آورده  
 که بلی را بسلا بدل کرده  
 (b) فضل از پیش چشم دانش و داد  
 در حس هست و راه جان بکشد



چون ترا کرد حلم از ساکن  
از ربایندگان شدی ایمن  
علم از عیب ما پرشیده  
تو نگفته سر از نیرشیده  
آدمی زاده ظلم و جهول  
فضل حق را همیزند بفضل

5. خصوصیات کلام حکیم سنائی را تعریف نمائید و از کلام او در اثبات بیانات خود شاهد بیاورید \*

## SECOND HALF

Examiner—PROF. FIDA ALI KHAN

1. خواص و مزایای کلام عرفی را که او را از شعرای معاصر ممتاز می سازد به تفصیل بیان کنید \*
2. مطالب اشعار ذیل را شرح کنید:—

ای داشته در سایه هم تیغ و علم را  
دی ساخته آرایش هم فضل و نرم را  
جم مرتبه خانن کز اثر نطق  
چون گل همگی گوش کند جذر اصم را  
گلچینه احسانش تنک مایه نگردد  
گر تا ابد انعام دهد صفر رقم را  
گر بشنود از دهر که مردرد کف تست  
بیرون فکند سکه ز آغوش درم را  
گر جاه حسودت بهر هندسی افتد  
در مرتبه نقصان رسد از صفر رقم را  
هر عطسه که از مغز کمان تو کشاید  
ریزد بگریبان بقا خون عدم را

- (a) از جم در اشعار فوق که مراد است و دلیل بر مدعا چیست \*

4 (b) مصرع اول را از بیت ثانی چه طور باید تقطیع کرد که  
بروزن درست افتد \*

4 8. منکه باشم عقل کل را نازک انداز ادب  
مرغ اوصاف تو از ارج بیان انداخته  
معنی این شعر را بالاستیعاب بقید تحریر آرید \*  
یا

مطالعهای ذیل را با توضیح جمیع معاسن و معایب موازنه  
کنید -

مطلع عرفی

ای متاع درد در بازار جان انداخته  
گوهر هر سود در جیب زیان انداخته  
مطلع شاعر دیگر

ای ز دهم غیر غوغا در جهان انداخته  
گفته خود حرفی و خود را در گمان انداخته

10 معانی یکی از این انتخاب را به نثر فارسی 4.  
خودتان چنان بنویسید که چیزی از مضمون فوت نشود -  
و مفهوم هر بیت قطعه مختار روشن گردد : —

(a) فشاندم در ازل گردی ز دامن این زمان بینم  
که نامش عالمست و میکشد در دیده خاقانش  
اگر طفل دلم را دایه حور آید و گر مریم  
بهنگام مکیدن زهر می جوشد ز پستانش  
مسلمانان کسی داند که در یکرنگی وحدت  
زهر مرچشمه خون ریزد از خوانی مسلمانان  
صفا می جوید از قصر دلی معموره جنت  
که انعام خرابیهها بود معمور ایوانش  
رفا را یاد گیر از درست کز ماتم سیه سازد  
لباس کعبه در مرگ شهیدان بیابانش

- (b) گر بیایند سخنم عود بر آتش مانند  
 حشر اموات شود هر طرف از نشر شمیم  
 در حرمگاه دل و حجله که طبع من است  
 حامله مریم و جز مریم اگر هست عقیم  
 غنچه از نسبت سحران بسخن عار کند  
 گر کنم طرز سخن باد صبا را تعلیم  
 در پذیرد زدم صورت دیوار حیات  
 مایه فطرت از ردام کند فهم حکیم  
 آن خردمند حکیم که بسبابة عقل  
 گیرم اندر حرم جوهر کل نبض سقیم
5. نبدی از سیرت عرفی را با رقایع و حوادث مهمه  
 بضبط تحریر آرید \*

## SECOND PAPER

*The figures in the margin indicate full marks*

### FIRST HALF

*Examiner—MAULVI MD. ISHAQ, M.A. B.Sc.*

1. Explain in Persian, with reference to the context, any five of the following :— 20

- (a) جهان را باهن نبایدش بستن  
 بزنجیر حکمت ببند این جهان را
- (b) اگر شعری را نو پیشه گرفتی  
 یکی نیز بگرفت خنیاگری را
- (c) قول او را نیست جز عالم زبلی  
 خط او را شخص مردم دفتر است
- (d) نه کمتر شوند این چهار و نه افزون  
 نه هرگز بدانند به راز بدت

- (e) گزینی از بهر چه دعوی کذبی  
چونکه نشوئی خود دستار خویش  
(f) لیکن از راه عقل هشیاران  
بشناسند فربهی ز آماس  
(g) چون نیندیشی که بی حاجت روان پاک را  
ایزد دانا درین صندوق خاکی چون دمید

2. Give in Persian the substance of any two of the following :—

14

- (a) باز جهان تیز پر و خلق شکار است  
باز جهان را بجز شکار چه کار است  
نیست جهان خوار سوی ما ز چه معنی  
خوردن ما سوی باز از خوش و خوار است  
قافله هرگز نخورد و راه نزد باز  
باز جهان رهنست و قافله خوار است  
صعبت دنیا مرا نشاید از یراک  
صعبت از اصل ننگ و مایه عار است  
صعبت دنیا بسوی عاقل و هشیار  
صعبت دیوار پر ز نقش و نگار است  
کار جهان همچو کار بیمش مستان  
یکسره نا خوب و پر ز عیب و عوار است
- (b) این چنبر گردنده بدین گوی مدور  
چون سر سهی قدر مرا کرد چو چنبر  
آمد برخم تیگرگی و نور برون تاخت  
تا زنده شب تیره پس روز منور  
هر رعهده و هر قول که کرد این فلک و گفت  
آن رعهده خلاف آمد و آن قول مزور  
من قول جهان را بزه چشم شنویم  
نه گفت که بسیار بود قول مبصر

قولى بقلم گوید گویا بکتابت  
 قولى بزبان گوید مشروح مفسر  
 مر قول قلم را بره چشمت بشنو  
 مر قول زبان را بره گوشت بنگر  
 گسستم ز دنیای جافی امل (c)  
 ترا باد بند و کشای و عمل  
 غزال و غزل هر دو آن مر ترا  
 نجویم غزال و نگویم غزل  
 مرا ای پسر عمر کوتاه کرد  
 فراخی امید و درازی امل  
 زمانی بکردار مست اشتری  
 مرا بست و بسپرد زیر سبل  
 بسی دیدم اعزاز و اجالها  
 ز خواجه جلیل و امیر اجل  
 ولیکن ندارد مرا هیچ سود  
 امیر اجل چون بیاید اجل

3. Mention the chief characteristics of Nāṣir-Khusraw's poetry. 6

4. Discuss the character of Nāṣir-i-Khusraw as it is revealed in his poems. 10

## SECOND HALF

Examiner—SHAIKH ABU NASR GILANI

1. Explain in Persian the following lines, noticing the allusions contained in them :— 8

خدای را چه فزاید از اینکه شیطان را  
 ذلیل کرد و نمود انتقام و راند از در  
 و این نشاط که گوساله را بسوخت کلیم  
 کلیم را نبود مدح و تهنیت در خور  
 روان مهدی آخر زمان چه فخر کند  
 ازین نوید که دجالی افکند ز خر

Or,

Explain in Persian with reference to the context :—

فیض نخست مادر اول ظهور حق  
 مرآت روحی رایت دین آیت هدا  
 معنی باد بسمله مسند نشین کن  
 مصداق نفس کامله عزلت گزین لا  
 کر حکم او بجنبش غبرا دهد مثل  
 در رأی او برامش گردون دهد رضا  
 راند قضا پیدایی کاجر است ای قدر  
 گوید قدر دمامد کامضاست ای قضا

2. Translate into English and explain the beauty and elegance of thought and speech contained in each of the following lines :—

16

ساقیان راست ازین معجزه کز ساغر می  
 آب و آتش را با یکدگر آمیخته اند  
 آتش طور عجیب با ید بیضا کردند  
 نار نمرد بآب خضر آمیخته اند  
 باده در کام فروریخته از زرین جام  
 خاران گوئی با باختر آمیخته اند  
 کرده در جام هلالی می خورشید مثال  
 یا هلالی است که با قرص خور آمیخته اند  
 قطره آب بهم بسته که هیچش نم نیست  
 با دران آتش نمناک در آمیخته اند  
 آب بی نم نگر و آتش پر نم که بطبع  
 هر نمش را بهزاران شرر آمیخته اند

3. Explain fully in Persian one of the following passages :—

A

ای طره و چهر تو یکی نار و یکی مار  
 بی نار تو در نارم و بی مار تو بیمار  
 بی نار تو یار است مرا نیاله و اندره  
 بی مار تو کار است مرا مریه و قیمار

جز من که بنار تو ر مار تو گریزم  
 دیار گریزند هم از نثار و هم از مار  
 نبود عجب ار رام شود مار تو بر من  
 زیرا که شود رام چو مقلوب شود مار  
 در چهره تو خال تو ای غارت کشمیر  
 بر قامت تو زلف تو ای آفت فرخار  
 چون زنگیکی ساخته در جلد نشیمن  
 چون هندوکی آمده از سر و نگونسار

B

الحمـد که از موهبت ایزد داور  
 زد تکیه بر اورنگ حمل خسرو خاور  
 الماس نشان شد فلک از ژاله بیضا  
 یاقوت نشان شد چمن از لاله احمر  
 در دامن گل چنگ زده خار بخواری  
 ز آنگونه که در ریش بدامان توانگر  
 در لاله و گل خلق خرامان شده چونانک  
 در آذر نمرد براهیم بس آزر  
 نرگس بجمال گل خیری شده خیره  
 ز انگونه که بیمار کند میل مزعفر  
 لاله چو یکی حقه بیجاده نمودار  
 در حقه بیجاده نهان نافه اذفر

4. Give your estimate of Qa'ani as a poet.

14

Or,

Discuss the following statement :—

'Qa'ani was one of the greatest and the least moral of the modern poets of Persia.'



## THIRD PAPER

## FIRST HALF

Examiner—MAULVI SHAH KALIMUR RAHMAN, M.A.

*The figures in the margin indicate full marks*

1. در باره حدوث علم کلام و جدال و پیدا شدن اشعریّت و اعتزال چه می دانید مجمالاً بیان کنید \* 10
2. اصطلاحات ذیل را شرح کنید : — 10
- جوهر - عرض - هیولی - شکل بدیهی الانتاج - کلیات خمس
3. برخی از حالات مصنف گوهر مراد به حیطة بیان بیآرید \* 10

یا

- عناصر بسیط بر چند گونه است \* بتفصیل و تشریح بیان نمائید
4. رقائق ایام محاصره قلعه حیدرآباد مسمی به گلکنده ( تاریخ چهاردهم رجب ) را بعبارت ساده خود بنویسید \* 10
5. خلاصه عبارت ذیل را در فارسی ساده خود بنگارید و بفرمائید این واقعه از کدام مقام نسبت دارد \* 10
- ” ازان حرکت که چشم کواکب را در حدقه تدویر حیرت نشاند جنس عرض را بر نوع جوهر تقدیم بالشرف لازم آید و باین سند که در اتمام نردبان یک زینہ در میان مانده بر مذهب نظام که به طفره قائل ست برهان سلم مسلم شد - حاضران پسند سویدای دل را بر مجمر عقیدت افشاندند و ناظران آیه ” زُلْٓنَ یَکَادُ “ تا ” اِنَّهٗ لَمَجْلُوْنٌ “ خواندند \* ”

## SECOND HALF

Examiner—DR. A. SATTER SIDDIQUI

*The questions are of equal value*

*Answer ANY FOUR questions*

جواب بیارسی بنویسید

1. حاجی بابا چه طور در دست ترکمانان افتاد و اسباب دلاکی او چه طور بکار آمد - بیان نمائید \*



2. کنگاش حاجی بابا با خویش و قلیان فرروشی را بیان نمائید \*
3. معانی الفاظ و فقرات مذکور ذیل را شرح دهید :—  
خواستاری - عرقة الوثقی امیدواری - کشیدن توئون - باری  
برای خدمتگذاری بخاکپای حضرت شهریار عیضه داشتیم - قاطرچی -  
در شریعت دیت خدشه رانص مریم نیست - ارزق پوش - رتق و  
فتق - شایگان - رَلَا تَحْسَبَنَّ الَّذِينَ قَتَلُوا فِي سَبِيلِ اللَّهِ أَمْوَاتًا \*
4. ترکیب آدمی از روح و جسم را بیان کنید - دالم و راحت  
که متعلق بانها است نیز تحریر نمائید \*
5. " در مقابل هر صفت حسنة در جنس از صفات (a) ردیله  
واقع است " - شرح دهید \*  
قاعده کلیه در معالجه امراض نفسانیه چیست (b) بوجه  
اختصار بیان کنید \*

## FOURTH PAPER

*The figures in the margin indicate full marks*

## FIRST HALF

Examiner—MAULVI ISHAQ

1. Translate into English any two of the following :-

30

(a) خطی که در دوره ساسانی معمول بوده در کتب و  
کتیبه های آندوره را بدان نگاشته اند بخط پهلوی معروف است -  
پهلوی چنانکه دیدیم نام مهمترین زبانهای دوره ساسانی بوده -  
ولی محققین غالباً این کلمه را فقط برای خطه دوره ساسانی  
استعمال می کنند و زبان آندوره را بیشتر فارسی رسطی میگویند -  
کتیبه مهمی که از دوره ساسانی باقیمانده کتیبه ایست که اردشیر  
بابکان مؤسس این سلسله به تقلید اجداد هخامنشی خود در  
روی تخته سنگی در فارس نگاشته و آن بدر قسم پهلوی کلدانی  
و دیگری را پهلوی ساسانی گویند نوشته شده و با ترجمه یونانی  
همراه است \*

(b) دماغ ما مانند چراغی است که زندگی ما را روشن میکند ازین رو کسانی که گرفتار ناخوشیهای دماغی هستند مانند دیوانه ها و ابله ها بدبخت ترین و سزادار ترین مردم بدلسوزی می باشند البته این چراغ بدن روغن می خواهد و اگر روغن نریزم در اندک زمان بی نور شده و کم کم خاموش میشود درسا و تحصیلات از یکطرف - قوای دماغی ما را بکار می اندازد پرورش میدهد بزرگ میکند - اما از طرف دیگر نیز آن قوا را که بمنزله روغن چراغ هستند بمصرف می رساند و اگر ما جای آن را پر نکنیم و آن قوه ها را تعمیر ننماییم بزودی بدن ما ضعیف و علیل می شود و چراغ عمر ما خاموش می گردد \*

(c) عرفی در استحکام کلام و تسلسل مضامین در شعرای قصیده گو کم نظیر بلکه میشود گفت بی نظیر است هر شاعری که بخواهد در یک مضمون تسلسل قایم کند و اشعار متعدده در آن بگوید عموماً یکی دو شعرش خوب بیرون میباید و باقی زورکی ازین جهت اساتذۀ عقب تسلسل مضامین نرفتند مگر نظامی در مثنوی خوب از عهده بر آمده در یک مضمون اشعار بسیار یکدست بلیغ گفته عرفی تسلسل مضامین را در قصیده دنبال کرده و خوب از عهده بر آمده و اغلب مضامین متعدده مناسب را همچنان پهلوی هم با استحکام کلام جا داده که معلوم می شود یک مضمون است در چندین شعر آمده برای مثال اشعاری از قصیده مشهور او که در مناقبت حضرت علی است نقل می کنم \*

2. Translate into English, adding notes where necessary :—

20

ایرانیان که فرکیان آرزو کنند  
باید نخست کار خود جستجو کنند  
مرد بزرگ باید و عزم بزرگ تر  
تا حل مشکلات به نیمری او کنند

در اندلس نماز جماعت شود بپا  
 در قادسیه چونکه بخونها رضر کنند  
 شد پاره پرده عجم از غیرت شما  
 اینک بیآرید که زنها رفر کنند  
 نسوان زشت موی پریشان کشیده صف  
 تشریم عیدهای شما مو بمو کنند  
 آزادگی بدستۀ شمشیر بسته اند  
 مردان همیشه تکیۀ خود را بدر کنند  
 قانون خلقت است که باید شود ذلیل  
 هر ملتی که راحتی ر عیش خو کنند

## SECOND HALF

*Examiner*—SHAIKH ABU NASR GILANI

Translate into Persian A and any one of B or C :—

50

## A

The storm had just broke,—thunders were rolling over our heads,—the lightning flashed,—torrents of rain were pouring down with fearful noise,—there seemed to be a general commotion of the elements, when my Mariam, unveiling herself, extinguished the lamp. She had scarcely laid herself down, when we heard an unusual violent noise at the aperture in the ceiling : sounds of men's voices were mingled with the crash of the thunder ; trampling of horses was also distinctly heard ; and presently we were alarmed by a heavy noise of something fallen in our room and near our bed, accompanied by a glare and a smell of sulphur.

' 'Tis a thunderbolt, by all that is sacred ! Oh, Heaven protect us ! ' cried I. 'Fly, my soul, my wife, escape !'

## B

I perceived a Persian horseman, bearing a female behind him, and making great speed through a glen that wound nearly at the foot of a more elevated spot, upon which I was standing. The female evidently had been placed there against her will, for as soon as she perceived me she uttered loud shrieks, and extended her arms. I immediately flew down the craggy side of the mountain, and reached the lowermost part of the glen in time enough to intercept the horseman's road. I called out to him to stop, and seconded my words by drawing my sword, and putting myself in an attitude to seize his bridle as he passed. Embarrassed by the burden behind him, he was unable either to use his sword or the gun slung at his back, so he excited his horse to an increased speed, hoping thus to ride over me ; but I stood my ground, and as I made a cut with my sabre, the horse bounded from the road with so sudden a start, that the frightened woman lost her hold and fell off.

## C

Derveesh Baffer is esteemed one of the best reciters of poetry and tellers of tales in Persia ; and there is no country in the world where more

value is placed upon such talents ; he who possesses them in an eminent degree is as certain of fortune and fame as the first actors in Europe. Derveesh Seffer, who is honoured by the royal favour, has a very melodious voice, over which he has such power as to be able to imitate every sound, from that of the softest feminine to the harshest masculine voice. The varied expression of his countenance is quite as astonishing as his voice and his action is remarkably graceful, and always suited to the subject. His memory is not only furnished with an infinite variety of stories but with all the poetry of his country ; this enables him to give interest and effect to the most meagre tale, by apt quotations from the first authors of Persia.

### FIFTH PAPER

*The questions are of equal value*

#### FIRST HALF

*Examiner—MAULVI SHAH KALIMUR RAHMAN, M.A.*

*ONLY FOUR questions are to be attempted*

1. (a) Explain the significance of تشبیه and کنایه , مجاز مرسل .  
(b) Illustrate, with examples, the difference between توزیة and ایهام .
2. Define and illustrate the following figures of speech :—  
براعة استهلال - ارماد - لف و نشر - تلمیم - توشیم -
3. Discuss the chief features of صنائع معنوی and صنائع لفظی .

*Or,*

What is تجنیس ? Mention its different forms with examples.

4. Define :—

سبب - علت - رکن - ردیف - دخیل - تاسیس - روی - قانیه -

5. State the principal rule or rules on which the scansion of the Persian poetry is based.

*Or,*

Scan the following lines and name the metres :—

- (a) زهی در چشمت بخون مردم  
کشاده تیر و کشیده خنجر  
رخى چو ماهت صباح دولت  
خط سیاهت شب معنبر
- (b) بملازمان سلطان که رساند این دعا را  
که بشکر پادشاهی ز نظر مران گدا را

## SECOND HALF

Examiner—DR. A. SATTAR SIDDIQI

ONLY FOUR questions are to be attempted

1. What do you know of the *Avesta*, *Zand*, *Pazand*, and *Pahlavi* ?
2. What relationship does the Persian language bear with Sanskrit and Prakrit ? Illustrate your answer with examples.
3. Give the cardinal numerals in Persian with their Sanskrit equivalents and explain the differences between the Persian and Sanskrit forms by stating the laws of the interchange of sounds governing the forms of words in question.

4. Explain the etymology of برشکال , کاه , ماه , ناخن , خوک , آهن , آمله , زنجبیل , داغ , آشتی

5. Write notes on the following words :—

چوکندي , سبق , کمند , بيزار , حاشا , جلوه , تماشا  
( in the hemistich گرم سوت (چوکندي شکوہش اگر سایہ انگند  
, دسپنا ؟ ( کہ گرمس از لباس گرم سوت افزون نمی گردد in  
کچری ایام .

## SIXTH PAPER

The questions are of equal value

## FIRST HALF

Examiner—AGA MUHAMMAD KAZIM SHIRAZI

Answer ANY THREE of the following

1. To what extent did the Arab conquest of Persia influence the life, the language, the literature, and the thought of the Persians ?
2. Describe briefly the development of religious and philosophical literature in Persian.
3. Give the origin and development of Sufi literature in Persian, and mention some of the most important Sufi Persian poets, giving a short biography of some of them.
4. How would you class and characterise Avicenna as a philosopher and a poet ?
5. Discuss the characteristics of early and modern Persian poetry as regards form, style and subject.
5. Write short notes on :—
  - (a) Ikhwan's Safa.
  - (b) Mafatih'ul 'Ulum.
  - (c) The Fihrist.

## SECOND HALF

*Examiner—M. FIDA ALI KHAN**The questions are of equal value**Attempt any FOUR of the following questions*

1. Prove and illustrate the following statement :—  
'The Saljuq Period is the Augustan Age of Persian literature.'
2. How do you account for the strange fact that despite the Mongols' vandalism and general aversion and hostility to all letters their rule actually proved more favourable to the production of historical literature than any other period of Persian history? Name and describe some of the best known historical works written during this period.
3. A larger number of Persian poets came to India during the Safavi rule than at any other time of Persian history. Mention the causes which led to this exodus. Name some of the most renowned among these emigrants, with brief biographical notices of at least four.
4. Whom do you consider the greater patrons of arts and letters—the Safavis or the Qacharis? State reasons in support of your view.
5. How are the national awakening of Persia and the patriotism born of it, affecting and moulding the present day Persian literature?
6. Of Akbar, Jahangir, and Shahjahan, who was the greatest patron of Persian arts and literature? State facts in support of your contention.

## SEVENTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner—DR. M. Z. SIDDIQUI, M.A., PH.D.**The questions are of equal value*

1. Discuss :—  
'The success of Muhammad was, mainly, due to his attractive personality and the intrinsic value of his teachings'  
Or,  
Describe and discuss the causes of the civil war after the Caliphate of 'Uthmān and its effects on the future history of Islam.
2. Compare 'Abdul Raḥmān I of Spain with al-Manṣūr, as a founder and builder of an empire.  
Or,  
Compare Spain under 'Abdu'l-Raḥmān II with the Eastern Islamic empire under al-Māmūn.
3. Give a brief sketch of the career of Ahmad b. Ṭūlūn and of the rise and fall of the Tulunides in Egypt.

## SECOND HALF

*Examiner—AGA MD. KAZIM SHIRAZI**The questions are of equal value**Answer ANY FOUR of the following questions*

1. State and discuss the causes of the easy conquest of Persia by the Arabs.

2. Give a short sketch of the rise and fall of the Ghaznavides.
3. 'To the Safavi Dynasty belongs the credit of making Persia a nation once again.' In what sense was the Safavi movement nationalist?
4. Sketch the careers of Humayun and of his contemporary on the Persian throne. Summarise the salient features of the economic life of India in Akbar's time.
5. What part did the Buwayhides play in the history of Islam? Name the most important ruler of the dynasty and give a short sketch of his career.

### EIGHTH PAPER

(ESSAY)

*Examiner*—DR. M. Z. SIDDIQUI, M.A., PH.D.

*The figure in the margin indicates full marks.*

Write an essay on any one of the following :—

100

- (a) Contribution of India to Persian literature.
- (b) The influence of Persian culture on modern India.
- (c) اسائش در گیتی تفسیر این در حرف است  
با درستان تطف با دشمنان مدارا

### INDIAN VERNACULARS—BENGALI

FIRST PAPER

*The questions are of equal value*

FIRST HALF

*Examiner*—RAI BAHADUR DR. D. C. SEN, B.A., D.LITT.

*Answer Question 2 and ANY TWO of the rest*

1. Discuss the principal features of the Brahminic school of Bengali poetry and the importance of Bengali folk-lore.
2. Take a bird's-eye view of the literature of the Manasa-cult in Bengal from the 13th to the 17th century.
3. What is the relation of the Ramayana to the Jataka stories? Compare and contrast Krittivas with Raghunandan Goswami and discuss the value of the innovations introduced by Kavi Chandra in his recension of the Epic.
4. Give full accounts of the three best Moslem poets of Bengal of the old school.
5. Analyse the poetical features and other merits of any three of the following poets :—
  - (a) Mukundaram Kavikankan.
  - (b) Bharat Chandra Rai Gunakar.
  - (c) Ram Nidhi Gupta.
  - (d) Dasharathi Rai.
  - (e) Ghanaram Chakravarty.

6. Give a full account of the contributions to Bengali literature by the most eminent workers amongst the European writers in the early years of the East India Company.

## SECOND HALF

*Examiner*—MR. MANINDRAMOHAN BASU, M.A.

*Answer ANY THREE questions*

1. What was the condition of Vaiṣṇavism in Bengal in the pre-Caitanya period, and how was it modified by the teachings of Caitanya?
2. 'Vṛndāvana was the cradle of Gauḍīya Vaiṣṇavism in the sixteenth century.' Justify this statement.
3. 'The modern Saha'iya doctrine of Bengal is an offshoot of post-Caitanya Vaiṣṇavism.' Either justify or refute this statement.
4. Give an account of Caitanya's travels in the South.
5. Show what Śrīnivāsa or Nārottama did to propagate the Vaiṣṇava faith in Bengal.

## SECOND PAPER

### FIRST HALF

*Examiner*—MR. BASANTARANJAN RAY

*The questions are of equal value*

*Four questions to be attempted, including Question 1.*

1. Render into modern Bengali, adding notes where necessary :-

ভিশরণ গাবী কিস অঠকুমারী ।  
 নিঅ দেহ করুণা শুনমে হেরী ॥  
 তরিত্তা ভবজলধি জিম করি মাঅ সুইনা ।  
 মথবেণী তরঙ্গম সুনিয়া ॥  
 পঞ্চ তথাগত কিস কেড়ুমালা ।  
 বাহঅ কাঅ কাহিল মাআজাল ॥  
 গন্ধ পরসর জইসৌ তইসৌ ।  
 নিংদ বিহনে সুইনা জইসৌ ॥  
 চিঅ কল্পহার অগত মাজে ।  
 চলিল কাহ্ন মহাসুহ সাজে ॥

*Or,*

তিনি তুমণ মই বাহিঅ হেলৈ ।  
 হাঁউ সুভেলি মহাসুহ লীলৈ ॥  
 কইসপি হালো ডোবী ডোহারি ভাভরিআলী ।  
 অস্তে কুলিগণ মাকৈ কাবালী ॥



ঠই লো ডোষী সঅল বিটলিউ ।  
 কাজ ৭ কারণ সসহর টালিউ ॥  
 কেহো কেহো তোহোরে বিরুঝা বোলই ।  
 বিহুজ্ঞ লোঅ তোরে কঠ ন মেলই ॥  
 কাজে গাই তু কামচণালী ।  
 ডোষি ত আগলি নাহি ছিণালী ॥

2. Explain fully and refer to the context :—

ফুটিল কদমকুল ভবে নোআঁইল ডাল ।  
 এভৌ গোকুলক নাইল বালগোপাল ॥  
 শৈশবের নেহা বড়ারি কে না বিহুডাইল ।  
 প্রাণনাথ কাহ্ন যোর এভৌ ঘর নাইল ॥  
 মুছিয়া পেলাইবৌ বড়ারি শিষের সিন্দুর ।  
 বাহর বলয়া মো করিবৌ শঙ্খচূব ॥  
 কাহ্ন বিনী সব খন পোডএ পরানী ।  
 বিষাইল কাণ্ডের ষাএ যেহেন হরিণী ॥  
 পুনমতী সব গোআলিনী আছে স্মখে ।  
 কোণ দোয়ে বিধি যোক দিল এত দুখে ॥  
 আহোনিশি কাহ্নাঞির গুণ সৌঅরিঅ ।  
 বজরে গড়িল বুক না জাএ ফুটিঅ ॥

3. Compare the language of the songs of Kāhnpāda with that of the Sri-kṛṣṇa-kīrtana. Can you call the language of the former Old Bengali? Give your reasons.

4. What traces of the influence of Jayadeva do you notice in the vocables and other matters of the Sri-kṛṣṇa-kīrtana? Refer to one or two songs of the Sri-kṛṣṇa-kīrtana composed after the songs of the Gītagovinda.

5. Give a critical estimate of the conception of the character of Rādhā as you find her in the Sri-kṛṣṇa-kīrtana.

6. Translate faithfully into English :—

বাই যমুনার পাণিকে আইস  
 সখি যোর সঙ্গে ।  
 যমুনা জলে কুস্ত ভরিঅ  
 আসিব এ বড় রঙ্গে ॥  
 হেন বুলী রাধা কলসী লজা  
 জাএ গজগড়ি ছান্দে ।  
 আলকে শোভে বদন তাহার  
 যেহেন কলঙ্ক চান্দে ॥

আল ।

পাইল রাধা কালীদহ কুল

লইয়া সখি সমাজে ।

ঘাটত ভেটিল নান্দের পো

কাজ না বুঝিল লাঞ্জে ॥

হাসিতে খেলিতে গোপ নারীগণ

লাগিলা যমুনা তীরে ।

কাহ্নাঞির মুখ কমল দেখিয়া

কেহো না ভরিল নীরে ॥

## SECOND HALF

*Examiner*—MR. NALINIKANTA BHATTACHARYYA, M.A.

*The figures in the margin indicate full marks*

*Answer Question 5 and ANY TWO of the rest*

1. How does Vijaya-gupta indicate the date of the composition of his poem? Compare the text of the poem as we get it at present with a genuine Bengali text of the 15th century A.D. and discuss how far the former can be regarded as a genuine text. 18
2. Discuss the characters of Chūnd, Manasā, and Behulā and show how far they can be regarded as types representing the society of the period in which the poem of Vijaya-gupta was written. 18
3. Is there any indication in Bhabānīdāsa's poem on Gopīchandra that each of the four *siddhas*—Minanātha, Gorakṣanātha, Kanuḍā, and Haḍifa—had a poem recounting his exploits? Can you identify any of these poems? Which one of these poems was the most popular? How many versions of this last are known to you? 19
4. Discuss the age and authorship of *Gorakṣa-vijaya*. 18
5. Annotate and explain passage C and either A or B, writing philological notes on the words underlined :— 24

## A

পাইক মাঝি এড়ি গেল নোকা রহিল পড়ি ।

আপনে ডুপালা নোকা কি দোষ কাণ্ডারী ॥

বিষাটে ছাপাই নোকা বসি রৈছে সুখী ।

সুখাইল গজা যমুনা নদী দিল লুকি ॥

শুধু বীননাথ তুচ্ছ কি বলিব আর ।

ডালাইভের হস্তে তুচ্ছ সপিতা ডাণ্ডার ।

মৈশের গোরেড দিলা পহরি উন্দুর ।

বিলাল পহরি দিলা ঘন পাত্র হুহু ॥

## B

সপ্তমে কহিয়ে শুন গুরুর বিচার ।  
 সংসার অসার জান গুরুমাত্র সার ॥  
 তিন গুণ প্রমাণ কারণ মহাশয় ।  
 তাহার সমান গুরু আনিয় নিশ্চয় ॥  
 জ্ঞানাজ্ঞান জালে গুরু সোবর্ণের মতে ।  
ধন্দ পথ ভাঙ্গি গুরু দেখাইল পথে ।  
চমক উপরে যেন পাথর ঘসয় ।  
 দীপ্তিমন্ত অনল যে হেন নিকলয় ॥  
 তনু মধ্যে হেন মতে আছে নিরঞ্জন ।  
 গুরুপদে ভক্তি করি করহ দর্শন ॥

## C

পরাণ আমার সোতেরে দিয়া,—  
 আমার ভাসাইলা কোন্ ঘাটে ।  
 তারার তলে সদাই চলে নিশীথরাতের ধারা ;  
 সঙ্গে সাথী নাইক বাতি, নাই কুল নাই কিনারা ।  
 অকুলের কুল গো  
 দরিরার সাগর গো  
 আর কয় বাকৈ পাইমু তোমায়  
 আমার লগগো আগাইয়া ।

## THIRD PAPER

## FIRST HALF

Examiner—RAI BAHADUR PROF. D. C. SEN, B.A., D.LITT

*The questions are of equal value*

*Answer Question 3 and ANY TWO of the rest*

1. Where does Kavikankan adhere to the standard of the indigenous school of Bengali poetry and where does he deviate from it?

2. Analyse any three of the following characters :—

Kalketu, Vasunai, Maniktara, Chandravati, Kanchanmala of Dhoper Path, Munir the snake-charmer, Tinkari Kaviraj, Murari Sil, Queen Kamala, and Kaji Munif.

3. Explain *any four* of the following with reference to the context :-

(a) বুক শোভে ব্যাঘ্র নখে, অক্লি রান্না ধূলি মাখে  
শিশু মাখে যেমন ঘোড়ল ।

(b) পাইয়া বীরের সাড়া, প্রবেশে ভিতর পাড়া,  
মাংসের ধারয়ে দেড় বুড়ি ।

(c) মনে মনে মহাবীর করেন যুক্তি ।  
ধনঘড়া লয়ে পাছে পলায় পার্শ্বতী ॥

(d) ছিঁড়া কানি পিঁধা রে তার  
ছিঁড়া কানি পিঁধা ।  
ঘুরিয়া ঘুরিয়া ফকির বাজায় সারিন্দা ॥  
কটা তাহার মাথার চুল লম্বা মোচ দাড়ি ।  
সারিন্দা বাজায় ফকির চোখের জল ছাড়ি ॥

(e) ধেকান খাইয়া পড়িলে জমিনে  
মায় তুল্যা লইত কোলে রে ।  
এখন রিদরে বিধলে ছাঁড়িছেন কেউ  
না দেখে রে ॥

(f) আমার না মাজুর মাও রে, আরে ভাল, বুকের কলিজা ।  
আমার না মাজুর মাও রে, আরে ভাল, সাক্ষাৎ দশভূজা ॥  
আমার না মাজুর মাও রে, আরে ভাল, তীর্থ বারাগসী ।  
আমার না মাজুর মাও রে, আরে ভাল, দেবের তুলসী ॥

4. Where does the difference between the ballads and the Gitikathas lie? Illustrate your answer by a reference to Kajalrekha and Kanchanmala on the one hand and Mahua and Malua on the other.

5. (a) Give an account of the life and works of Mukunda Ram. Why is he called a poet of the transition period in Bengali poetry?

(b) Give an estimate of the literary value of the ballad of হাতীখে

## SECOND HALF

Examiner—MR. SAILENDRANATH MITRA, M.A.

*The figures in the margin indicate full marks.*

1.

*Either,*

10

Attempt a comparative study of the মেঘনাদবধ and the বৃজসংহার, with special reference to (a) conception of theme, and (b) rapprochement of characters.

*Or,*

Compare Madhusudan and Hemchandra as poets, noticing the peculiarity of method followed by each in handling his theme, together with your observations on the general execution of the *kāvya*s.

2. Examine the dramatic touches and situations, if any, in *either* 10  
the *বেশবাবব* or the *বৃহসংহা*.

3. *Either,* 10

Show how the *rasas* have been brought to play in the *গ্রন্থ* according to the psychological necessity of situations.

*Or,*

Give, in some detail and with illustrations, an estimate of the dramatic devices employed in the *গ্রন্থ*.

4. Explain, with reference to the context, *any one* of the following 12  
extracts, clearing allusions, figures of speech or traces of influence, wherever possible :—

(a) যথা অগ্নিশিখা দেখি' পতঙ্গ-আবলী  
ধায় রঙ্গে, চারিদিকে আইল ধাইয়া  
পৌরজন ; কুলবধু দিলা হলাহলি,  
বরষি' কুমুদসারে ; যন্ত্রধ্বনি করি'  
আনন্দে বন্দিল বন্দী । চলিলা অজনা  
আগ্নেয়-তরঙ্গ যথা নিবিড় কাননে ।  
বাজাইল বীণা, বাঁশী, মুরজ, মন্দিরা  
বাত্তকরো বিজাধরী ; হ্রৈষি' আকন্দিল  
হয়-বৃন্দ ; ঝন্ঝনিল কুপাণ শিখানে ।

(b) কে আছে জিলোকমাঝে প্রাণী হেন জন  
সুদূর প্রবাস ছাড়ি স্বদেশে ফিরিয়া  
( কি পঙ্কিল, কিবা মরু, কিবা গিরিময়  
সে জনম-ভূমি তার ) নিরাখি' পূর্বের  
পরিচিত গৃহ, মাঠ, তরু, সরোবর,  
নদী, খাত. তরঙ্গ, পর্বত, প্রাণিকুল,  
নাহি ভাসে উল্লাসে, না বলে মত্ত হ'য়ে  
“এই জন্মভূমি মম ।” কে আছে রে, হায়,  
ফিরিয়া স্বদেশে পুনঃ না কাদে পরাণে  
হেরে' শত্রু-পদাঘাতে পীড়িত সে দেশ !

(c) (i) রামাগণে শুনেছিলেন, কে একজন রাক্ষস চোখে ঠুলি দিয়ে  
ধাক্কাতো, স্ত্রীপুত্রের মুখ দেখুকো না, সেই এসে কি জন্মেছে ?

(ii) লক্ষ্মীর কথায় শুনেছিলেন, আপনার ছেলেকে খাওয়ার  
অন্ত সাপ রেখেছিল, আমারও তাই ইচ্ছে হচ্ছে । আমি  
মলে' এর দশা কি হ'বে !

(iii) কি খাওয়ার জান ? রাঙা জলপড়া । ভাগ্যিস্ ভালর ভালর  
কেটে গেল, নইলে লোক পাগল হয় । এমন জলপড়া  
নয় ! ভূমি যদি খাও ত অবনি খেই খেই করে' নাচ !

5. Elucidate, in your own Bengali, the central idea of any one of the following passages :— 8

(a) মানুষকে যদি আমরা সমগ্রভাবে এমনি করিয়া দৃষ্টির বিষয় করিতে পারিতাম, তবে তাহাকে এইরূপ সূর্য্যের মতই দেখিতাম। দেখিতাম, তাহার বস্তুপিণ্ড ভিতরে-ভিতরে ধীরে-ধীরে নানান্তরে বিস্তৃত হইয়া উঠিতেছে ; আর তাহাকে ঘিরিয়া একটি প্রকাশের জ্যোতির্মণ্ডলী নিয়তই আপনাকে চারিদিকে বিকীর্ণ করিয়াই আনন্দ পাইতেছে। সাহিত্যকে মানুষের চারিদিকে সেই ভাষারচিত প্রকাশমণ্ডলীরূপে একবার দেখ। এখানে জ্যোতির ঝড় বহিতেছে, জ্যোতির উৎস উঠিতেছে, জ্যোতির্বাষ্পের সংঘাত ঘটিতেছে।

(b) নর-অংশে জন্ম সেই রামনারায়ণ।  
তোমাতে জননীভাবে করিলা পাগলন ॥  
তোমার সেবার পঞ্চপাণ্ডু ছিল রত।  
পূজিল তোমায় রাজা বিক্রম-আদিত্য ॥  
অমর বান্দ্যকি ঋষি সূর্যধর স্বরে।  
রাখিয়াছে তব বশ ত্রিভুবন ভরে' ॥  
বেদব্যাস মহাঋষি ভারত রাচিয়া।  
প্রচারিল তব নাম জগৎ জুড়িয়া ॥  
সরস্বতী-বরপুত্র কাব কাগিদাস।  
তব বশ রঘুবংশে করিলা প্রকাশ ॥  
ভবভূতি তব নাম অনান্ত অক্ষরে।  
গাঁধিয়া ধুইয়া গেছে মানব-অস্তরে ॥

#### FOURTH PAPER

#### FIRST HALF

Examiner—MR. PRIYARANJAN SEN, M.A.

*The figures in the margin indicate full marks*

Write an essay on one of the following subjects :—

50

- Western influence in the historical novels of Bankim-chandra.
- Rabindranath's early writings and Western influence.
- Treatment of Humanity in Bengali literature as influenced by Western culture.

## SECOND HALF

*Examiner*—RAI BAHADUR PROF. D. C. SEN, B.A., D.LITT.

*Attempt only ONE question in the form of an essay*

[Full marks—50]

1. 'The opposition between the plain and the ornate style persistently dominated the history of Bengali Prose for almost half a century, and reached to a crisis in the two antithetical movements of the fifties, of which the genius of a writer like Bankimchandra alone could find a proper synthesis.' Discuss this statement, giving a concise sketch of the development of Bengali prose style in the first half of the 19th century.

2. Each of the following writers has been in his turn declared 'the father of modern Bengali Prose': William Carey, Ram Mohun Roy, Isvar Chandra Vidyasagar, Aksay Kumar Datta, Peary Chand Mitra, and Bankimchandra Chattopadhyay. Discuss the correctness of the epithet and the claims of each to such a description.

3. Give a sketch of early Bengali Journalism and its influence on the prose style of the period 1800-1857.

## INDIAN VERNACULARS—HINDI

## FIRST PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—RAI BAHADUR SUKDEO BIHARI MISRA

*Please attempt ANY THREE of the following five questions*

1. Kindly trace the rise and development of our Hindi Prose from the earliest times right up to the period of Bhartendu Babu Harish Chandra of Benares. Also trace the development of Hindi from the ancient dialects of India together with the origin and development of those dialects from the earliest period of India. What are the first, the second, and the third Prakrit? How did the advent of the Mughal period, the religious revival of that time, and the British rule affect our Prose literature and the public ideas as reflected in that literature?

2. Please trace the rise and development of the Khari Boli (खड़ीबोली) poetry in Hindi from the earliest to the present times, also giving the names and main characteristics of the principal writers whom you may mention in this connection. A few illustrations also may be given.

3. Will you please give a brief but illuminating account of our Hindi literature before the period of Surdas? How far can this be called the Vira Gatha (वीरगाथा) period of our literature? Please give reasons. What subjects and dialects did our writers mostly prefer at that time?

4. For about a century after Mahatma Tulsidas, our Hindi writers were mostly second rate poets and commentators. How far do you agree with this remark? Please give reasons in support of your opinion.

Also give the main characteristics of the writings of Senapati, Beharilal, Matiram, Ghanshyam, Lal Kavi (the writer of *Chhattra Prakash*), and Newaj, detailing as well their chief productions and the time of their writings.

5. What are the messages of Tulsidas, Kabirdas, Surdas, Vitthal Nath, Bhushan, and Deva Kavi? Name the principal productions of these writers and give the main characteristics of their writings. How did the writings of Kabirdas and Tulsidas affect the Hindu society of Northern India at the time? What is their main difference and how far can it help us in understanding the representative character of the two poets so far as the society in their times was concerned?

## SECOND HALF

*Examiner*—MR. NALINIMOHAN SANYAL, M.A.

*Attempt ANY THREE.*

1. What were the various circumstances which combined to bring about the religious movement in Northern India in the fifteenth and sixteenth centuries, and what were the main lines into which it resolved itself? Show how it served to give impetus to the vernacular literature of the country. Name the principal literary representatives of each line and characterise the literature it produced.

2. Is God निर्गुण (absolute) according to the Sufis? What relation do the Sufi poets seek to establish between God and Man? Show that the relation, as conceived by the Krishna-*bhakti* poets, is essentially the same, only with a slight difference. Name the principal Sufi Hindi poets and state the general characteristics of the literature they produced. Who may be regarded as pre-eminent among them?

3. The language of poetry should, according to Wordsworth, be the ordinary language of men. Show how far this dictum is applicable to the poetry of Jāysi, Tulsidas, and Surdas.

Show that the dialects adopted for, and the forms taken by, the works of these poets were suitable to the subjects they dealt with.

4. Name and describe the metres in which Tulsidas wrote his *Rām-charit-mānas*, *Vinay Patrikā*, *Gitāvali*, *Rāmāyan*, and *Kavitāvali Rāmāyan*. Whence did Tulsidas derive his ideas of the metres he used in these poems? Why did the metres employed by Tulsidas and Surdas in their principal works differ so widely from each other? Could the *Sura-Sagar* have been written in the form of the *Rām-charit-mānas*?

5. Poetry has been defined by some as the expression of the deepest feelings of the human mind. Show how far Tulsidas, Surdas, and Keshav Dās have succeeded in approaching this ideal, stating the phases of human life depicted by each. Give ample quotations in support of your statements.

6. Were there any other Hindi poets than Tulsidas who had composed the *Rāmāyan*? Why have their works remained neglected?

Name and give full descriptions of some *Bhakti* poets subsequent to 1700 A.D.



## SECOND PAPER

## FIRST HALF

Examiner—PANDIT SAKALNARAYAN SARMA

*The figures in the margin indicate full marks*

1. उत्तम-काव्य और अधम-काव्य की विवेचना अपने पठित ग्रन्थों की सहायता लेकर करो। काव्य किसे कहते हैं। यह भी लिखो। 10

2. वाच्य लक्ष्य और व्यङ्ग्य इन अर्थों में काव्यशास्त्र किसको प्रधानता देता है? यदि काव्य में कुछ दोष हो और ध्वनि अधिक निकलती है तो उसे उत्तम अथवा निकृष्ट काव्य कहना चाहिये। 10

3. जायसी, चन्द्रवरदायी तथा गोस्वामीजी में किस का युद्धवर्णन अधिक मनोहारी है? इसकी मीमांसा में यह बातलाओं कि उन लोगों ने रौद्र और वीररस में क्या भेद रक्खा है? 10

4. (a) गहीतेग चहुवान हिंदवान रानं । 20

गजयूथपरि कोप केहरि समानं ॥

करे रुंड मुंड करि कुंभ फारे ।

वरं सूरसामन्तहुकि गर्ज भारे ॥१॥

(b) प्रीतम को पतियां लिखूं जो कहूं होय विदेश ।  
तनमें मनमें नैनमें ताको कहासं देश ॥

(c) जैवत इयामनन्दकी कनियां ।  
कछुक खात कछु धरनि गिरावत  
छवि निरखत नंदरनियां ।  
आपुन खात नन्दमुख नावत  
सो सुख कहत न वनियां ।  
जो रस नंद यशोदा विलसत  
सो नहिं तिहुं भुवनियां ।  
भोजन करि नन्द अचवन कियो  
मांगत सूर जुठनियां ॥

(d) मन पकतैहो अवसर वीते ।  
दुर्लभ देह पाइ हरिपद भजु करम वचन अरु हीते ।  
सहसबाहु दसवदन आदि नृप बचन काळवलीने ।  
तुरकी अरबी हिंदवी भाषा जेती आहि ।  
जामें मारग प्रेम का सबै सराहै ताहि ॥

इन पद्यों के अर्थ और छन्द लिखो ।

## SECOND HALF

Examiner—LALA SITARAM, B.A.

The questions are of equal value

Candidates are required to attempt only THREE questions

1. Explain fully the signification of *Shabda* according to *Sants*. 16  
What is *Anshad Shabda*?

2. Explain fully in Hindi any one of the following two 16  
passages :—

(a) गगन मँडल के बीच में जहाँ सोहंमम डोरि ।  
सबद अनाहद होत है सुरत लगी तहँ मोरि ॥  
कवीर कमल प्रकासिया जगा निर्मल सूर ।  
रैन अँधेरी मिटि गई बाजै अनहद तूर ॥  
सुख मंडल में घर किया बाजै सबद रसाल ।  
रोम रोम दीपक भया प्रगटे दीनदयाल ॥  
कबीर सबद सरिर में बिन गुन बाजै तांत ।  
बाहर भीतर रमि रहा ताते छूटी भ्नांत ॥

(b) रसना कहँउ जो कह रस बाता । 16  
अमृत बयन सुनत मन राता ॥  
हरइ सो सुर चातक कोकिला ।  
बीन बंगि वेह बैन न मिला ॥  
चातक कोकिल रइहँ जो नाहीं ।  
सुनि वेह बैन लाजि छपि जाहीं ॥  
भरे पेम मधु बोलइ बोला ।  
सुनइ सो मांति घूमि कै डोला ॥  
चतुर वेद मति सब ओहि पाहां ।  
रिग जजु सावँ अथर्वन माहँ ॥  
एक एक बोल अरथ चौगुना ।  
इंदर मोरि बरम्हा सिर धुना ॥  
भासवती ब्याकरन सब पिंगल पाठ पुरान ।  
वेद भेद सो बात कहि तसु अनु लागहि बान ॥

3. Discuss the claim of Malik Muhammad Jaisi as the first great 16  
poet of Hindi.

4. Describe the characters of Gora and Badal as heroes of the 16  
*Padmawat*.

5. Describe the main points of difference between the language 16  
of the *Padmawat* and of *Kabir ki Sakhi*, bearing in mind that both  
are written in Eastern Hindi.

## THIRD PAPER

*The figures in the margin indicate full marks*

## FIRST HALF

*Examiner—PANDIT SAKALNARAYAN SARMA*

1. सुरपुर अरु कश्मीर दो उन में को है सुन्दर । 5  
को सोभाको भौन रूप को कौन समुन्दर ॥  
काको उपमा उचित देन दोउनको काकी ।  
या को सुरपुर की अथवा सुरपुर को याकी ॥

यह विशुद्ध व्रजभाषा की कविता है कि नहीं ? तीसरी पंक्ति में कौन दोष है उसका नाम बताओ ।

2. हम लड़ेंगे और लड़ते रहेंगे, 15  
क्यों न जीजान से हमसे लड़ें ।  
धोन बैठेंगे हितोंसे हाथ हम  
हाथ धो कर क्यों न वे पीछे पड़ें ॥  
दूर की लेंगे वकेंगे वहक कर,  
काम के हित जो हुआ वे ही नहीं ।  
किस तरह लेंगे खिलौना चांद का,  
बात है करतूत कुछ है ही नहीं ॥

इन पद्यों में कौन कौन शब्द विशेषरूप से महाविरा दिखलाने के लिये प्रयुक्त हुए हैं उनका विचार करी । “लेंगे खिलौना चांद का” यह वाक्यांश क्या व्याकरण से शुद्ध है ?

3. श्रीचन्द्रावली के प्रेम पर एक निबन्ध लिखो । 10  
4. हिन्दी का पहला नाटक कौन है ? हिन्दी के प्राचीन तथा नवीन 5  
नाटकों की रचना में क्या अन्तर है ?  
5. रूपक, नाटक, नेपथ्य, प्रस्तावना, विष्कम्भक, पारिपाश्विक, और 10  
अङ्गावतार शब्दों के क्या अभिप्राय हैं ?

6. जुग तू बन की वीन परम सोभित मनभाई । 5  
लख अरु सुर की मनहु जुगल गठरी लटकाई ॥  
कै कोमल अरु तीव्र सुर भरे जगमन मोहैं ।  
आरोहन अवरोहन के कैहै फलसोहैं ॥

इन पद्यों में अलंकारशब्दों के अभिप्राय लिखते हुए बताओ ।

## SECOND HALF

Examiner—PANDIT KRISHNA BIHARI MISRA

1. पण्डित सदल मिश्र तथा पण्डित लल्लू लाल के गद्यों की आलोचना 10  
मुलनात्मक दृष्टि से करो ।

2. (a) उपमा, रूपक, इलेष, और समासोक्ति के लक्षण उदाहरण के 15  
साथ लिखो ।

(b) को जीतै सिवराजसो, अब अंधक अवरंग । 5  
भूषण भनि सवहि त वहि जीत्यो हो जुरि जंग ॥

इस पद्य में कौन प्रधान अलंकार भूषण कवि ने माना है ? अलंकार  
मंजूषा की रीति से यहां प्रधान अलंकार कौनसा है ?

3. चिरजीवौ जोरी जुरै क्यों न सनेहगंभीर 15  
को घटि वै वृषभानुजा वै हलधर के वीर  
नये विससिये लखिनये दुर्जन दुसह सभाय  
आंटे परि प्राननिहरै कांटे लौ लगी पाय ।  
पक्षाहि तिथि पाइये वाघर के चहुं पास  
नित प्रतिपून्थौ ही रहति आनन ओपउजास । ३ ।  
भजन कह्यो तासों भज्यो भज्यो न एको वार  
दूर भजन तासों कह्यो सो तू भज्यो गंवार । ४ ।  
तंलीनाद कवित्तरस सरस राग रतिरंग  
अनबूडे बूडे तरे जेबूडे सब अंग । ४ ।

अलंकार निर्देशपूर्वक इन दोहों के अर्थ प्रकटित करो ।

4. उपर्युक्त पद्यों में कौनसी रीति तथा कौनसा गुण है ? कारण के 5  
साथ उत्तर लिखो ।

## FOURTH PAPER

(ESSAY)

The figures in the margin indicate full marks

## FIRST HALF

Examiner—MR. JAGANNATH PRASAD CHATURVEDI

Write an essay in simple Hindi on any one of the following 50  
subjects :—

- (a) General characteristics of Hindi literature.
- (b) Describe fully 'the new influence from the West revived rather than checked the cultivation of Hindi poetry.'
- (c) Raja Shivaprasad.
- (d) The creators of modern High Hindi.

## SECOND HALF

*Examiner*—MR. AMBIKAPRASAD BAJPAIWrite an essay on *one* of the following subjects :—

50

(1) What is the difference between Hindi and Urdu? Discuss and trace the origin of Urdu, laying special emphasis on the dissimilarity of Hindi and Urdu. Give examples of peculiarities of grammar and style that have come into Hindi through Urdu or Persian. Will Hindi and Urdu ever become one language?

(2) Who were the most famous Muhammadan poets of Hindi? How far was Persian influence brought to bear on Hindi literature through their works? What do you know of the artistic standard of Hindi of Muhammadan writers? How was Hindi poetry encouraged by Mughal emperors? What is the attitude of present-day Muhammadans towards Hindi?

(3) Was modern High Hindi developed from Urdu by the exclusion of Persian and Arabic words and the substitution of those of pure Indian origin, Sanskrit, or Hindi? What do you know about Gorakhnath? Was he the first prose writer of Hindi? Compare his Hindi with that of Lallulā'i.

(4) Is Sūfism another name of Adwaitavād? Was Moulana Rūm aware of Adwaitavād when he wrote his famous Masnavi? Was Kabir a Sūfi poet? If not, who is the first Sūfi poet of Hindi and when did he flourish? Give the names of Sūfi poets after him with dates.

—

## INDIAN VERNACULARS—ORIIYA (PRINCIPAL)

## FIRST PAPER

*The figures in the margin indicate full marks**Attempt any THREE from EACH half*

## FIRST HALF

*Examiner*—MR. GODAVARIS MISRA, M.A.

1. Give an account of the life and writings of Sarala Das, especially stating the part played by him in the formation of the Oriya nation. 16½

2. "Sanskrit dominated the early poetry of Orissa in the matter of its form and metre." Examine this statement and illustrate your views with reference to poetry of the period from 1430 to 1568. 16½

3. Give an account of the life of the author of the great Oriya Bhagabat and an elaborate estimate of the influence of his life and writings upon the life and character of the Oriya people. 16½

4. Give an account of Oriya Chhanda. How far can you reconcile with it the views of Mr. Manomohan Chakrabarti about the form and metre of Oriya poetry since the earliest times? 16½

5. Indicate the extent of indebtedness of the Oriya literature to the present district of Ganjam. 16½

## SECOND HALF

**Examiner—MR. P. R. SEN, M.A.**

1. Give an account of the most famous book of Abhimanyu Samanta Sinhar. Indicate the influence of former poets upon him. Also give an account of his life and an estimate of the value of his works and contributions to Oriya literature. 16½
2. State and explain the influence of Chaitanya upon Oriya literature. 16½
3. "But for the rajahs and members of their families, the course and progress of Oriya literature would be very different from what they have been." Discuss this fully, giving examples in support of your views, where necessary. 16½

4. කිතු වෙළුනු බව බැලීමට බලාපොරොත්තු වෙමු. 10  
 ඉතිරි කාලයේදී ඉතිරි වන බවට බලාපොරොත්තු වෙමු.  
 " ඔබ ඉතිරි වන බවට බලාපොරොත්තු වෙමු."  
 " ඔබ ඉතිරි වන බවට බලාපොරොත්තු වෙමු."

Justify this statement with elaborate reference to the famous works of Dina Krisna.

5. "With the advance of time literature proceeds from the simple and natural into the complex and artificial forms but to revert again into the original state." Explain to what extent this statement is applicable to Oriya literature.

## SECOND PAPER

*Examiners—* { MR. BINAYAK MISRA, M.A.  
,, NILKANTHA DAS, M.A., M.L.C.

The questions are of equal value.

1. Write a short note on the *Koili* lyrics as a distinct literary species with a special detailed reference to the *Keśava Koili* or the *Artha Koili*.
2. Comment on the faithfulness of Saralā Dāsa's version of the *Mahābhārata* to the original Sanskrit Epic.
3. Explain the following passages with reference to the context :—

୧) ଶୁଦ୍ଧ ସତ୍ୟ ଯେ ସେ ଉଦ୍ଧାରରେ ଗୀତ ।  
ତତ ସତ୍ୟେ ମୋହିଲେ ସେ ସବୁଙ୍କର ଚିତ୍ତ ।  
ଏକକୁ ଆହେଳି ଲୁହମୟ କଣ୍ଠସ୍ବର ।  
ଲୁମ୍ବାଇଁ ଦୟାଳୁ ଯୋଗୁଁ ଗାନନ୍ତି ମଧୁର ॥  
ଶାନ୍ତା ଧ୍ୟାନୀ ପାହାନ୍ତି ଅଟଇ ଉଦୟ ।  
ସେହି ନ ଜାଣଇ ଗୀତର ସ୍ବର ସାବିତ୍ରୀ ॥

(b)

କି କିହିଁ ଗୋପୀମାନଙ୍କ କଥା । କିହିଲେ ଘାଟ ହେବ ସହସିଧା ।  
କେଣି ନାଥ କେଣି ଅବିମଳିନ । କୁହୁଁ ଶ୍ରୀରାମ ସେ ଯେହୁ ନଳିନୀ  
କାହାଣୀ ମରାଉ ॥ କୃଷ୍ଣ-ବିଷାଦୁଁ ନୋହୁଁ ବାହାଉ ॥

4. Narrate the story of Tapati and Samvarana in your own Oriya.

5. Write an appreciation of Dina Krishna Das as a poet, illustrating his characteristics by quotations from his *Rasa-Kallola*.

6.

କିହୁଲ ମନ ଆରେ ମୋ ବୋଲୁ କର ।  
କଳାଶ୍ରୀମୁଖ ଦାରେ ଦେ ଯଦି ଶୂଳରେ ॥  
କେତେଦିନକୁ ମନ ବାସି ହୁଁ ଆଶୁ ।  
କି ଯେନି ଯିବୁ ତୋର ହୃଦେ ଲେଖିଲେ ॥  
ସନ୍ତୁ ସେ ଯନ୍ତ୍ର ତୋର ପଞ୍ଜର କାଠି ।  
ଯାଉଣି ପୁରୁ ଶ୍ଵାନ ଶୂଳାକୁ ବାଣୀ ରେ ॥  
ସାତ ପଲକେ ମନ ତଣି ପାଲି ମୋଡି ।  
ସକାନ୍ତୁ ଶିଖି ହେବ ଏ ଚାରି ଦେହୁ ରେ ॥

Explain the above lines and comment on their form.

### THIRD PAPER

*The questions are of equal value.*

### FIRST HALF

*Examiner*—MR. GODAVARIS MISRA, M.A.

1. Compare Upendra Bhanja and Abhimanyu Samanta Sinhar in point of rhetorical composition, illustrating your statements from the recommended texts.

2. Indicate to what extent Abhimanyu Samanta Sinhar's Bidagdha Chintamani is modelled on the Sanskrit work Bidagdha Madhaba.

Or,

Bidagdha Chintamani is said to be the best work of Abhimanyu Samanta Sinhar. Do you agree? Give reasons for your answer.

3. "In the Chanson literature of Orissa, Baladev Rath Kavi-Suryya occupies a higher place than Upendra Bhanja." Discuss.

Or,

"The poets of the early period of the British Rule may all be said to be the successors of Upendra Bhanja in the field of literature." How far is this remark applicable to the case of Baladev Rath Kavi-Suryya?

4. Explain any three of the following giving the context :—

୧) ଶୀର୍ଷାବତ ନିର୍ଦ୍ଦାୟ ଯାଉଥିବାକୁ ଦେଲ ।

ସାଥୀ ସଖୀ କରୁଛ ପ୍ରତିପାଦୁଷେ ଶାନ୍ତ ହେ ॥

ସେ ମିଥୁନୁ ହେବା - ସାତକ - ନିଷାତକ ମହା ।

କିପାଳମୋଚନ ବିଲୋଚନ ସା ଶୀ ସହି ହେ ॥

ଆସି କାଶୀଗୁରୁ ବାସ କଲେ ଏହା ଜାଣି

ଅନ୍ୟ ଶେଷ ସମସ୍ତଙ୍କ ଏ ମହାମନି ହେ ॥

(୨) ଦିନେ ନାହିଁ ପୁଣି ତୋଡ଼ି ଶୁଦ୍ଧାଗଲେ ।

ହାତେ ବିଶାଖା କିଛିକାଟା ଆଗଲେ ॥

ସଦନାହିଁ ଆମୁକ୍ତି କି କାହା ହେଲା ।

ସଦନାହିଁ ଆଗୁ କଲେଣି ହେଲା ॥

ପୂର୍ବମାସୀ କୃଷ୍ଣନାମ ଶୁଣାଲେଲେ ।

ପୂର୍ବପୁଣ୍ୟେ ଶାଖାକୁ ତୁଷାରଲେ ॥

What is the rhetorical device employed here?

(୩) ଶୁକ୍ରଗ୍ରାସ ହେଲେ ଅଳ୍ପ ବହୁତ । ବୀଜମଧ୍ୟେ ସଦା ଚନ୍ଦ୍ର ଶୁକ୍ରା ।

ଲଗତ ସାମୁଦ୍ର ହେଲେ ବହୁତ । ଶରଦ୍ଦେଶନା ହୁଏ ସୁନ ମତା ।

ଫଳ ଫଳିଥାଏ । ଆନ ଅନ୍ଧାର ସମସ୍ତ ହୁଏ ॥

(୪) ଡେଇଁ ଏ ଶୁଭର ଶ୍ରୀମୁଖେ ମର ଘରଗୁଡ଼ି । ସମସ୍ତ ସା ।

ଡିକାଏ ହେଲେ ସେ ହୃଦୟସୁତାକେ ନୋହିଲା ବାସ ବିଳାସ ॥

ଡାକି ଛି ସୁଆଂଶୁ କଳାକୁ ଆକାଶ କରୁନାକୁ ପାଳନତା ।

ଡାକା ଯିବି ଅନ୍ଧାରୀ କିଛିକାଟି ହେ ଶାମ ଏକ ଆଗୁତା ॥



6. Trace the continuity of Mediaeval Oriya literature, from Upendra Bhanja to Baladev Rath Kavi-Suryya through Abhimanyu Samanta Sinhar, marking off the characteristics of each in relation to one dominant literary note.

### SECOND HALF

Examiner—MR. NILKANTHA DAS, M.A., M.L.C.

1. "The racy style" of Fakirmohan Senapati is said to have demonstrated "how forcible the pure Oriya language is in the hand of a master." Justify or criticise this comment in reference to Fakirmohan's *Lachhma*.

2. Write a critical note on *Basanta-Gāthā* in relation to the other works of its author

3. Radhanath "has lengthened his poem" *mahāiātrā*, "by some allegorical stories which teem with didactic lines."—Do you think this remark justified? Support your answer with definite references to the text.

4. Explain :—

(a) ସୁଗୀର୍ଣ୍ଣ ଜୀବନ-ସ୍ରୋତ ବହୁ ଏ ଭାଗରେ,  
 ପୁଣ୍ୟ-ଅଭିଷେକ-ଆଶା ପଡ଼ି ତା ଲକ୍ଷ୍ୟରେ।  
 ଭାବେ ହେଉ ସେ ସୁଲଳିତେ ବିସ୍ମୟ ନିମିତ୍ତେ,  
 ଶୁଣି ତବ ଅଭିନବ ମହାଦେବ-ପାଠେ।  
 ଶେଷେ ମାୟା ମା, ନବନୀର, ନବଭୂଷା କର,  
 ଦିବ୍ୟ ଚେତନାମୟ ନବ ନର-ମାଣୀ-ହୃଦି ।

(b) "ଦ୍ରାହ୍ମଣୀ ସମସ୍ତ ଯଥେ ସଜ୍ଜା ଅଗ୍ରେ ସଜା

ପଣିବ କୌଶଳୀ କଳି, ବଲ୍ଲୁକସ୍ମରୁଦ୍ଧେ  
 ପୁଣି ସଶିରୀ ଶୁଷ୍ପତେ ସେହି ଧର୍ମ-ତୀର୍ଥମୂଳେ,  
 ଅଲକ୍ଷିତେ କୌଣି ମୂଳ, ଅନ୍ତଃସ୍ଥାତ୍ ହୃଦି  
 କଳ୍ପଜୀବୀ ସେ ଦୁମତ, ଦୁଗୁ ତାରକାଧୀନୀ  
 ସର୍ବମୟ, ତାଙ୍କ ହୃଦେ ଶାନ୍ତିରାଜ ଭୂମି,  
 ଅସାଧ୍ୟ ସେ ବିଧାୟ, ପାହା ଭାଗିନୀଦେହେ  
 ଘୋଷିବ, ଘାଣି ନ ପୂର୍ବେ ଧାନେ ଅନ୍ନହରି ।"

5. Expand the idea contained in the following line :-

ସୁଖେ ଦୁଃଖେ ଏକତୃପ ସେ ପ୍ରେମ ଅତୁଳ,  
 ସବୁ ଅବସ୍ଥାରେ ଯାହା ରହେ ଅଗୁଞ୍ଜଳ,  
 ବିଧୂତ ପ୍ରାଣର ଯାହା ବିଶ୍ରାମ ଅପାର,  
 ଜିହ୍ୱା ହରି ନପାରର ସୁଧାମୟ ସାର,  
 କାଳବଳି ଶଳେ ଶୂଳି ସର୍ବ ଆବରଣ,  
 ସେହି ସାମୁଦ୍ରେ ଧାଏ ପ୍ରେମ ଚିରନ୍ତନ ।  
 ଏସନ କଳ୍ୟାଣମୟ ପ୍ରେମର ବିଭବ,  
 ବିଶୁଦ୍ଧ ବିସ୍ମୟାମୟ ଯାହା କି ଦୁର୍ଲଭ !

#### FOURTH PAPER

*The figures in the margin indicate full marks.*

#### FIRST HALF

*Examiner—MR. P. R. SEN, M.A.*

*Attempt ANY THREE questions.*

1. To what extent has reference been made to inanimate Nature in Oriya poetry of the twentieth century and in Oriya poetry of the period preceding the twentieth century? If there be more abundant reference in one of these periods than in the other, state its cause. Exemplify your answer, if possible, with quotations, or by references. 16½
2. Contrast Oriya drama of the last two decades with that of the period preceding them. Illustrate the extent to which the influence of English drama is visible in Oriya drama of the last two decades. 16½
3. Name the first important piece of Oriya epic poetry. Illustrate the influence upon it of Milton and other English epic poets. 16½
4. State and exemplify the influence of English rhyme and rhythm upon modern Oriya poetry. 16½
5. "Modern Oriya prose is not only mostly a product of men versed in English prose but is also to some extent a copy of the latter." Examine this statement. 16½

#### SECOND HALF

*Examiner—MR. NILKANTHA DAS, M.A., M.L.C.*

*Write an essay on one of the following subjects :—*

1. The extent of Upendra Bhanja's influence on Abhimanyu Samanta Simhār. 80

2. "All the works of Upendra Bhanja are but illustrations of rhetorical art."

3. The poetic technique of Upendra Bhanja : how far, if at all, it influences modern Oriya poetry.

## INDIAN VERNACULARS—URDU—PRINCIPAL

### FIRST PAPER

*Examiner*—MAULVI M. D. ISHAQUE, M.A.

*The questions are of equal value.*

*Attempt any FIVE.*

1. "The first poet of the Urdu language who stands out with any distinction is Amir Khusraw." Justify the statement.

2. Describe the importance of Marsia-writing in the development of Urdu Poetry. Whom do you think to be the best Marsia writer? Give your reasons for the same.

3. "Mir's fame rests on *Ghazals* and *Masnawis*, and Sanda is regarded as the master of *Qasidas* and *Satire*." Discuss.

4. Compare and contrast the Lucknow school of poetry with the Delhi school, pointing out differences in style, diction and sentiment.

5. What part does the plateau of Deccan play in the history of Urdu literature? Where was Wali actually born?

6. When did the Drama-writing in Urdu originate? Do you think it has already perfected as an art by itself?

### SECOND PAPER

*Examiner*—SHAMS-UL-ULAMA MAULVI HIDAYET HOSSAIN,  
KHAN BAHADUR

*The figures in the margin indicate full marks.*

1. Comment on the styles of Wali and Mir Taqi, followed in their poetry, comparing carefully their views on Sufism. 20

2. Give your own opinion in regard to the greatness of Sawda as a *Qasida* writer. 15

*Or,*

Expand the idea contained in the following verse :—

کیفدت چشم اسکی مجمع یاد ہے سودا

ساعر کو مرے ہاتھ سے لہذا کہ چلا میں

3. Translate, into English, either of the two, adding notes where necessary :— 15

(a) جنت کی منت انکے دماغوں سے کب آئے

خاک رہ اسکی جذبے کفن کا عبیر ہو

چھاتی قفس میں داغ سے ہو کیوں نہ رشک باغ

جوش بہار تھا کہ ہم آئے اسی۔ ہو

یان برگ گل آراتے ہیں پرکالے جگر  
جا عذلیب تو نہ مری همصفر ہو  
ہوئے ہیں میکدے کے جوان شیخ جی برے  
پھر درگذر یہ کرتے نہیں گو کہ پیر ہو  
کس طرح آہ خاک مذلت سے میں اُٹھوں  
افتادہ تر جو مجھ سے مرا دستگیر ہو

(b) مہر ہر ذرہ میں مجھکو ہی نظر آتا ہے  
تم بھی ٹک دیکھو تو صاحب نظران ہے کہ نہیں  
پاس ناموس مجھے عشق کا ہے اے بلبل  
ورنہ یان کونسا انداز فغان ہے کہ نہیں  
آگے شمشیر تمہاری کے بہلا یہ گردن  
موسے بارک تر اے خوش کمران ہے کہ نہیں  
دل کے پرزدن کو بغل بیچ لگے پھرتا ہوں  
کچھ علاج انکا بھی اے شیشہ گران ہے کہ نہیں  
دیکھا میں قصر فریدون کے در آؤں اک شخص  
حلقہ زن ہو کے پکارا کوئی یان ہے کہ نہیں

4. What is the theme of *Fasanai-Ajayib*? When, by whom, and at whose instance, was this book compiled? 15

Or,

Compare the styles of Ra'ab Ali Beg Suroor, and Sher Ali Afsos, illustrating your views with original quotations.

5. Write short notes on any four of the following:—

20

ملکہ مہرنگار - انجمن آرا - جان گلکرائسٹ -

کرہ ندا - حاتم طائی - شہزادہ منیر -

6. What were the seven conditions to be fulfilled by the suitor of Princess Huan-Banu? By whom and with whose particular help were these fulfilled? 15

Or,

Describe carefully the part played by the staff of the College of Old Fort William in the development of Urdu literature.

## THIRD PAPER

Examiner—MAULVI M. D. ISHAQUE, M.A.

The figures in the margin indicate full marks.

## FIRST HALF

1. Comment on Hali's criticism of Urdu *ghazals* that you come across in his *Muqaddama-i Shīr-o Shā'ri*. 20
2. Compare and contrast the style of Hali and Sir Syed Ahmed as founders of the new School of Urdu Literature. 15
3. Either,  
Whom do you think to be the best Urdu novel-writer? Has Sarshar any superiority over Sharar? 15  
Or,

Agha Hashar is called the "Shakespeare of India"—justify this opinion with careful comment on the dramatic works of Hashar.

## SECOND HALF

1. Translate into English, any two of the following, adding notes where necessary :— 15

- (a) بس ہجوم نا امید کی خاک میں ملجائیگی  
یہ جو ایک لذت ہماری سعی بے حاصل میں ہے  
گرچہ ہے کس کس برائی سے رلے ہا اینہم  
ذکر میرا مجھ سے بہتر ہے کہ اُس محفل میں ہے  
دیکھنا تقریر کی لذت کہ جو ارسنہ کہا  
میں نے یہ سمجھا کہ گویا یہ بھی میرے دلمیں ہے
- (b) غم اگرچہ جان ہے یہ کہاں بچپن کہ دل ہے  
غم عشق گر نہ ہوتا غم روزگار ہوتا  
کہوں تجھ سے میں کہ کیا ہے شب غم بری بلا ہے  
مجھے کیا برا تھا مرنا اگر ایک بار ہوتا  
رگ سنگ سے ٹپکتا رہ لہو کہ پھر نہ تھمتا  
جسے غم سمجھ رہے ہو وہ اگر شرار ہوتا
- (c) قاصدوں کے پاؤں تورے بدگمانی نے مری  
خط دیا لیکن نہ بتلایا نشان کوے دوست  
فرش گل بستر تھا اپنا خاک پر سوئے ہیں اب  
خشت زیر سر نہیں یا تکیہ تھا زانوئے دوست

اس بلائے جانے آتش دیکھئے کیرنکر ندیے  
دل سرا شیشے سے نازک دل نازک خوئے درست

2.

*Either,*

Account for the fame and popularity of Iqbal as one of the greatest poets of the modern age. 18

*Or,*

Was Ghalib superior to all of his contemporaries in regard to the philosophical aspect of Urdu *ghazals*? Discuss, quoting from the originals.

3. "The great merit of Atish is that he portrays the various emotions in elegant and attractive phraseology." Discuss this. 14

#### FOURTH PAPER

*Examiner*—AGA MD. KAZIM SHIRAZI

*The questions are of equal value.*

*Attempt any FIVE*

1. Account for the origin and development of Prose-writing in Urdu literature. When did it really begin?
2. To what extent did the Hindus contribute to the development of Urdu literature? Whom do you think to be the best Prose-writer among them?
3. Write short notes on the following :—Sher 'Ali Afsus; Darya-yi Latafat; Baital Pachisi; Nihal Chand; and Ra'ah Ali Beg Surur.
4. Name the three best Prose-writers in the Second Period of the development of Urdu literature and give a short account of each. State reasons for your choice.
5. What are the results of the English influence on Urdu literature? Write what you know of the Aligarh movement.
6. Discuss the merits of Iqbal as a Poet and a Philosopher.
7. When and how did the Drama originate in Urdu? Trace its gradual development.

#### INDIAN VERNACULARS—BENGALI (SUBSIDIARY)

##### FIFTH PAPER

*Examiner*—MR. TAMONASCHANDRA DASGUPTA, M.A.

*The questions are of equal value.*

1. Explain any two of the following passages, with reference to the context, either in English or in Bengali :—

(a) অনেক একত্র হইয়া গ্রাম্য লোকেরা দেখিতে আসিল যে, কিরূপ ভক্ত আশা হইতে নাশিরাছে। হইজন ধর্মবাজক বলিলেন, যে, ইহা কোন

অলৌকিক জীবের দেহাবশিষ্ট চর্ম । শুনিয়া গ্রামবাসিগণ তাহাতে ঢিল মারিতে আরম্ভ করিল, এবং খোঁচা দিতে লাগিল ।

(b) একদিন রাজর্ষি নদীতীরে বসিয়া উপাসনা করিতেছেন, এমন সময়ে তথায় এক হরিণী জলপানার্থ সমাগত হইল । ঠিক সেই সময়েই কিছু দূরে একটি সিংহ প্রবল গর্জন করিয়া উঠিল । হরিণী এত ভীত হইল যে, সে পিপাসা শাস্তি না করিয়াই, নদী পার হইবার জন্ত উচ্চ লম্ফ দিল ।

(c) খেতে চায় ? তা' বটে ! যেমন চাষা তার ভেঁম্বি বলদ । খড় জোটে না, চালকলা খাওয়া চাই ! নে নে, পথ থেকে সরিয়ে বাধ । যে শিঙ, কোন দিন দেখ্‌চি কাকে খুন ক'রবে । এই বলিয়া তর্করত্ন পাশ কাটাইয়া হুন্ করিয়া চলিয়া গেলেন ।

(d) কাহার কণ্ঠের মুকুতার মালা  
ছিঁড়িয়া পড়িল শতধা হ'য়ে,  
কার হৃদিশোভা বিকচ কুম্ম  
শুকাইয়া গেল হৃদয় ছুঁয়ে—  
দেখিবারে তাহা মুহূর্তের তরে  
ধামিল না ওর অন্তের পথে,  
অই বায় চলে, অই বায়,-বায়  
সৌরভ্যতিময় দ্রুতগ রথে ।

2. Summarise the arguments contained in the article "আমি ও নিরামিষ ভোজন" by Chunilal Bose.

3. Give the substance of any two of the following passages :—

(a) দাও আমাদের অভয়মন্ত্র,  
অশোকমন্ত্র তব !  
দাও আমাদের অমৃতমন্ত্র,  
দাও গো জীবন নব !  
যে জীবন ছিল তব তপোবনে,  
যে জীবন ছিল তব রাজ্যাসনে,  
মুক্ত দীপ্ত সে মহাজীবনে  
চিস্ত ভরিয়া লব !  
মৃত্যুতরণ শঙ্কাহরণ  
দাও সে মন্ত্র তব ।

(b) এই ত সে প্রিয়তম মম জন্মস্থান,  
যার তরে ছিল সশা ব্যাকুলিত প্রাণ,  
যার প্রীতিময়ী মূর্তি চাক্ষুশরশন,  
করিতাম এতদিন চিন্তা অম্লক্ষণ ;

আজ তার সেই মূর্তি নিরখি নয়নে,  
যদি কি বিষল স্থখ উপজিল মনে—  
কাদম্বিনী বরবার সময়ে যেমন,  
নিয়ত সলিলে করে ভূতল সেচন !  
আজ এ জনমভূমি আমার তেমন,  
করিছে অন্তরে কত স্থখ-বরিষণ ।

(c) দুইধারে বন্ধুর চুর্গম দগ্ধ রক্তবর্ণ উচ্চগিরিশ্রেণী, মধ্যে সঙ্গীর্ণ মরুপথ,  
বোঝাই-করা উষ্ট্রের শ্রেণী চলিয়াছে ; পাগড়ি-পরা বণিক ও পথিকেরা কেহ বা  
উটের পরে কেহ বা পদব্রজে, কাহারো হাতে বর্ষা, কাহারো হাতে সেকেলে  
চক্ৰকি-ঠোকা বন্দুক ; কাবুলি মেঘমল্লস্থরে ভাঙ্গা বাংলায় স্বদেশের গল্প করিত,  
আর এই ছবি আমার চোখের সম্মুখ দিয়া চলিয়া যাইত ।

4. Amplify the idea contained in any two of the following passages :—

(a) দেব যদি হয় বাম, সিদ্ধ নহে কোন কাম,  
যজ্ঞ হৈল সংহার-কারণ ।  
তখন জানিল মন, জিনিতে নারিব রূপ,  
যখন পড়িল শত্রুঘন ॥

(b) যশোলাভ-লোভে আশু কত যে ব্যয়িলি, হায়,—  
কব' তা' কাহারে ?  
সুগন্ধ-কুসুম-গন্ধে অককট বধা ধায়,  
কাটিতে তাহারে ;—

মাৎসর্য্য-বিষ-দশন কামড়ে, রে, অমুকণ—  
এই কি লভিলি লাভ, অনাহারে অনিদ্রায় ?

(c) দৈন্তের মাঝে আছে তব ধন,  
মৌনের মাঝে রয়েছে গোপন  
ভোমার মস্ত অগ্নিবচন,  
তাই আমাদের দিয়ে ।

5. Translate any one of the following passages into Bengali :—

(a) Who in all the land was like Roland, Earl of Warwick, that peerless champion and powerful lord, rich and generous, honoured and feared from one end of the kingdom to another? Many a strong castle and famous city were his; many a brave knight followed his banner; gold and silver had he in plenty; but of all his treasures none was dearer to him than his only daughter, the fair Felice, as wise as she was beautiful, and as beautiful as she was proud. The minstrels were never done singing her praises.

(b) Babar is said by Elphinstone to have been "the most remarkable prince that ever reigned in Asia." To a simple heart he added great courage, and a perseverance amounting to genius. His life is a strange one; but the manner of his death, as historically related, is stranger still. We are told that when Humayun lay ill, and seemed likely to die, Babar



resolved to sacrifice himself in order to save his son. So he walked three times round his bed praying all the while earnestly; and at last he exclaimed, "I have taken it away." The force of will, thus exercised, in the father, may have led to a healing faith in the son. This much is undoubtedly true, that from that time Humayun began to recover and Babar to decline.

### SIXTH PAPER

*Examiner*—MR. BASANTAKUMAR CHATTERJEE, M.A.

*The questions are of equal value.*

1. Frame ten sentences to illustrate the use of ten foreign words in use in Bengali, including at least one word from each of the following languages: (1) English, (2) Persian, (3) Arabic, (4) Portuguese, and (5) Sanskrit.

*Or,*

Fill up the blanks in the following extract with suitable words:—

লোকে—আটপোরে ও পোষাকী কাপড় থাকে,—জাতিরই সেইকপ আটপোরে ও পোষাকী ভাষা আছে। —ভাষার নাম চলিত ভাষা, আর—ভাষার নাম সাধু ভাষা; —কাপড় পরিয়া কেহ অষ্ট—থাকে না, সাধু ভাষায়ও — — — গ্রহর—কহে না। মনোগত—প্রকাশ করিতে চলিত ভাষারই—দেখিতে—যায়। —চলিত ভাষাই—ভাষার—। রচনার নিরবচ্ছিন্ন আভিধানিক—প্রয়োগ—এক—অসম্ভব। সংস্কৃতমূলক—সঙ্গে সঙ্গে চলিত ভাষার—প্রয়োগ না করিলে চলে না।

2. Re-write the following extracts, correcting errors, if any, of grammar, idiom, and spelling:—

যত্নপিতৃ মহারাজা তাঁহার অধীনস্থ কর্মচারী সমূহকে সাবধানপূর্বক আবশ্রুকীয় কর্ম সম্পন্ন্যের আদেশ জারি করিয়াছিলেন, তথাপিও তিনি মিথ্যা সাক্ষী দেওয়াইবার জন্তে কোনও নির্দোষী লোককে নিগ্রহ করিতে বলেন নাই। তিনি জ্ঞানমান বেষ্টি ছিলেন। সর্বত্রই তাঁহার খুশনাম শ্রুত হয়।

অত্র পত্র প্রাপ্ত মাত্র কুশল পত্র দিও

যত্ন তত্র থাক বাপার তত্রবাত্রা নিও।

3. Give short accounts of any four of the following:—

(a) Vidyapati, (b) Candidās, (c) Caitanya-dev, (d) Bhāratcandra, (e) Bankimcandra, (f) Mukundarām Cakravartī, (g) Dwijendra Lal Roy, and (h) Iswar Gupta.

*Or,*

Write an appreciation in Bengali of your favourite Bengali author.

4. Translate into English:—

প্রকৃত্ত। গোবরার বা। তোমার কয়টা ছেলে গা?

গোবরার বা। আমি ছিলাম আর কোথায়? বাড়ীতে ছিলাম।

প্রফুল্ল। তুমি কি জেতের মেয়ে ?

গোবরার মা। যেতে আস্তে খুব পারব। যেখানে বলবে সেখানেই যাব।

প্রফুল্ল। বলি, তুমি কি লোক ?

গোবরার মা। আর তোমার লোকে কাজ কি মা ? আমি একাই তোমার সব কাজ করে দেব। কেবল দু' একটা কাজ পারব না।

প্রফুল্ল। পারবে না কি ?

গোবরার মা। পারব না কি ? এই জল তুলতে পারব না, আমার কাঁকালে জোর নাই। আর কাপড় গোপড় কাচা, তা না হয় মা তুমিই ক'রো। বাসন-টাসনগুলো মাজা, তাও না হয় তুমি আপনিই করলে। আর ঘর ঝেঁটোনো, ঘর নিকোনো, এটাও আমি পারব না।

প্রফুল্ল। তবে পারবে কি ?

গোবরার মা। আর যা বল। সন্তে পাকাব, জল গড়িয়ে দেব, আমার এঁটো পাত ফেলব, আর হাট-বাজার করব। তা আমি বুড়ো মানুষ, হাৰাকালী, আমি ত হিসাব দিতে পারব না। তবে যা দেবে সব খরচ করে আসব। তুমি বলতে পারবে না যে আমার এই খরচটা হ'ল না।

প্রফুল্ল। মা, তোমার মত গুণের লোক পাওয়া ভার।

5. Determine the place of Bhāratcandra or Bankimcandra in the history of Bengali literature.

## INDIAN VERNACULARS—ASSAMESE (SUBSIDIARY)

### FIFTH PAPER

Examiner—MR. M. M. BOSE, M.A.

The figures in the margin indicate full marks.

Answers may be given either in Assamese or in English.

1. What idea have you formed about the condition of Assam as depicted in Manomati? 15
2. Give the substance of the poem *বন ভীৰৱৰ দুটি বাট*, or of *বই-মাতালী ভাবব ভেটি উহন*. 15
3. Estimate the poetic merit of *জানমালিনী*. 12
4. Estimate Rukma as a hero, and Krishna as a lover. 16
5. Explain any two from each of the following groups :— 20

### GROUP A

(a) পছৰীৰ স্বভাব হেনো সকতেও গহীন আৰু গোৰোঠা বিধৰ আছিল। কিন্তু তেওঁ আচল গোৰোঠা আৰু নিৰবয়সাল স্বভাবৰ নাছিল :

(b) বই অহা ব্ৰহ্মপুত্ৰৰ সোতটো মোৰ নিচলা ফকিৰে ভেটা দি  
বাখিৰ খুজিলেনো পাৰিম কেনেকৈ ?

(c) ফুলবিলাকে হেনো এনেকৈ ফুলিয়েই তোমাক মোক ভাল  
লগাবলৈ, তোমাক হেপাহ লগাবলৈ স্মথ পাৰি।

#### GROUP B

- (a) সকলোতে আছে তেওঁ ;  
কিন্তু নেদেখে যে কেওঁ,  
ওবনীৰে মুখ ঢাকি থাকে ওচৰত ;  
সেয়ে খেপিয়ালে হয় !  
পাবলৈকো নাই নাই  
একগকো চিন-ছাব, ধৰা-ওপৰত।
- (b) আজি হয় ! ফুৰিছ যে ধনছালী মাৰি  
ছদ্দিনীয়া পৃথিবীত সুৰে-ভৰি-কাঢ়ি ;  
কাইলৈকে দেখা পাম, আমাৰেহে দৰে,  
মূলি-মাকটিৰে মিল হ'ব শেহস্তৰে।
- (c) আহা ! কেনে স্নকলমে ডেকালবাবোৰ  
ফুৰিছেহি ওভোতাই চুবীয়াৰ ঠোৰ।  
নাই বাধা বিচিনি ও নাই গুৰুজন ;  
দেখি নিবজন ঠাই উত্ৰাবল মন।

#### GROUP C

- (a) কৈগো জনী ওভোতাই পিঙ্গিল কাপৰ।  
কাঞ্চুলীক তল কৰি আঞ্চল উপৰ ॥  
ভৰিত মুকুত আবে হুপূৰক মাথে।  
কৃষ্ণক চাহিব লাগি চলে আথে বেথে ॥
- (b) সৰ্বকালে তোমাৰ পালন দেৱজ্ঞাক।  
এতেক বুলিবে কৃষ্ণ নালাগে আমাক ॥  
স্মৰণে পাপ হবে দেখিলে মুকুতি।  
হেন হ'ব স্তুতি কৰা কমন যুগতি ॥
- (c) বাক নাটিলেক যুদ্ধে যজ্ঞবাজা জাক।  
ধান-সুজ লৈয়া ভূমি খেদি বাহী তাক ॥  
বন্ধুবান্ধব হুগুনিলা হিতবুদ্ধি।  
বতন্তৰ কণীয়াক কি কৰে ঔষধি ॥

6. Give the substance of the following—

12

যি চাকৰী কৰে সি আকৌ ব্ৰাহ্ম !! পৰব চাকৰী কৰি ব্ৰাহ্মণ বা ব্ৰাহ্ম বুলি নিজকু পৰিচয় দিলে ব্ৰাহ্মণ বা ব্ৰাহ্ম শব্দৰ অৰ্থৰ ব্যতিক্ৰম কৰা হয়। যি দাস সি ব্ৰাহ্মণ হ'ব নোৱাৰে। প্ৰকৃতিৰ বিকৃতি মাথোন। ব্ৰাহ্মণ কেৱল পৰমজ্ঞান, পৰম শুকৰ অধীন, আন কাৰো অধীন হ'ব নোৱাৰে।

### SIXTH PAPER

*Examiner*—MR. A. N. BORAH, M.A.

*The figures in the margin indicate full marks.*

*Answers may be given in Assamese or in English.*

1. "No nation or tribe was ever so completely isolated as not to admit a certain number of foreign words . . . it matters not how many words may be derived in common from another language, it does not prove the identity of any two dialects. It is the grammar that we must look to to decide their identity." (*Max Müller*.)

18

Discuss the question of identity of Assamese and Bengalee language in the light of the above statement.

2. State in what sense the singular suffixes টো, ডাল, জনী, খন, and টটা are used and give an example of each of them.

12

*Or,*

Name the suffixes commonly used in Assamese to indicate plural number and give an example of each.

3. State the difference, according to the author of সাহিত্যবিচাৰ, between মিহলি পত্ৰ and শুদ্ধ পত্ৰ and their general characteristics.

*Or,*

Write a short essay on general characteristics of অসাধাৰণ উপকথা।

4. Criticise the definition of literature given by the author of সাহিত্যবিচাৰ, drawing out the distinction between language and literature.

10

5. Distinguish with approximate dates what you consider to be the principal periods or stages in the history of the Assamese literature, stating the peculiarities of each period.

20

*Or,*

Compare and contrast the Vaiṣṇavism preached in Bengal with that in Assam, and discuss the reasons why the latter became successful.

6. Write what you know of হেম সব্বভট্টী and his writings.

15

*Or,*

Write a critical note on সাধবকন্দলী'ৰ বাৰাণস.

7. Write what you know of different kinds of ballads in Assamese language and discuss their importance in the history of Assamese literature.

15

*Or,*

Write what you know about কাক and his sayings.

## INDIAN VERNACULARS—HINDI (SUBSIDIARY)

## FIFTH PAPER

*The questions are of equal value.*

## FIRST HALF

*Examiner—MR. AMBIKAPRASAD BAJPAI*

N.B.—THREE questions (2, 4, and another) are to be answered.

1. What do you know of Mirabai and what is her position in Hindī literature?

2. Explain fully one of the following passages :—

(a) आह ! किसने इस कठिन समय में धर्म का यह उपदेश दिया ? सच है, मैं अब इस देह की कौन हूँ जो मर सकूँ ? हाय देव ! तुझ से यह भी न देखा गया कि मैं मरकर भी सुख पाऊँ । ( कुछ धीरज धरकर ) तो चलूँ छातीपर वज्र धरके लोकरीति करूँ । ( रोती और लकड़ी चुनकर चिता बनाती हुई ) हाय ! जिन हाथों से ठोंक ठोंक कर सुलाती थी, उन्हीं हाथों से आज चितापर कैसे रखूंगी ? जिसके मुँह में छाला पड़ने के डर से कभी मैंने गरम दूध भी नहीं पिलाया उसे ..... ( बहुत ही रोती है ) ।

(b) हिरण्य और मित्तके लाभसे मित्त का लाभ उत्तम है । इसलिये मित्र मिलने का यत्न करना और अपनी सचावट बचाये रहना चाहिये । स्वामी, अमात्य, जन, दुर्ग, कोश, दण्ड, और मित्त ये सात राज्य के मूलकारण हैं, इसलिये राज्य सप्ताङ्ग कहलाता है । ऐसा राज्य पाकर राजा दुष्टों को दण्ड दे, क्योंकि पूर्वकाल में ब्रह्माने दण्डरूप से धर्मको बनाया । जो लोभी और चञ्चलबुद्धि होता है, वह न्याय से दण्ड नहीं चला सकता । किन्तु जो सच्चा, पवित्र और अच्छे सहायकों से युक्त होता है, वह न्याय से चलाता है । शास्त्रकी विधि से जो दण्ड का प्रयोग करे तो देवता, असुर और मनुष्य सहित सब जगत् को आनन्द होता है, अन्यथा करे तो सब कोप करते हैं ।

3. Who is the most celebrated Hindi writer of modern times, and why?

4. Translate one of the following into English, adding explanatory notes where necessary :—

(a) यह पहाड़ गयासे कुछ दूर पड़ता है औ मैं सैलानी आदमी इस लिये दूसरे दिन पहुँचा—राह में कई एक गांव पड़े ; वहाँ की विचित्र भाषा औ विचित्र पहनाव देख मेरे चित्त में और ही भाव होता था । एक निरे गयानिवासी और दूसरे एक दूरेके मैथिल भी मेरे-साथ पढ़ गये थे । जब वे एक दूसरे से

बातें करते थे, तो विचित्र ही “कहलू, सुनलू” औ “कहैछी, सुनैछी” की झड़ी सुन पड़ती थी। और तो या ही, पर इनकी बात बात में “यू” और उनकी बात बात में “छी” था। बराबर नामक पहाड़ दूरही से देख पड़ने लगा। जान पड़ता था कि वह भी सिर उठाकर हमलोगों को देख रहा है। इसके सब से ऊँचे शिखर पर एक पेड़ भी बड़ा भारी देख पड़ता था, जैसे सिरपर पर तुराँ हो। इसी के पास एक पहाड़ था। इसका नाम लोगोंने “कौआडोल” बताया। यह बात भी लोगों से जानी गयी कि इसपर एक बड़ी भारी शिखा है, जो केवल कौए के बैठने से हिल जाती है।

(b) खिलते फूलों की सुगन्ध और सुन्दरता चढ़ी बढ़ी चहुं ओर फैली फबी मानों होइसी बदकर मैदान में उतर पड़ी है। सरसों के फूलने से जिस ओर दृष्टि फैलाकर देखो खेत के खेत बसन्ती ही बसन्ती बने ऋतुराज वसन्त महाराज की महिमा मानों प्रत्यक्ष दरसा रहे हैं। मदमाती कोइलिया की सुरीली कुडुक पंचम स्वरसे मी कुछ ऊँची तानें सुना सुना ऋतुराज को जुदाही रिश्ताती उनके ही गुन गा रही है। साथ ही रंग रंग के पखेरू नये विकसे फल पत्तों और फलों का स्वाद चख मनमगन हो तमाल, रसाल और अशोक की सघन ढाड़ियों पर नाच नाच कर चहकते हुए समय का राग अलाप कर समा बांध रहे हैं। क्या ही सुहावना समय है ! इन गुणों के कारण वसन्त सब ऋतुओं में श्रेष्ठ और ऋतुराज माना गया है।

5. Who is the most popular Hindi poet and what work of his is read by the learned and the unlearned alike?

6. (a) What are the chief rules for distinguishing the genders of nouns?

(b) Where is ने used as the case of agent? Give exceptions, if any.

(c) Explain five of the following expressions :—

वाछभोग पाना, जुहार करना, धूल में मिलाना, मूछ नीची करना, पत रहना, चमक दमक दिखाना, जी चुराना, लक दक्क सजावट, बीट करना, बिस्स बाहर, काम न देना, इति श्री होना।

## SECOND HALF

Examiner—MR. AMBIKAPRASAD BAJPAI

N.B.—The FIRST TWO questions are compulsory. Of the others, only ONE is to be answered.

1. Translate into English any two of the following :—

(a) दुग्ग पर दुग्ग जीते सिरजा शिवाजी गाजी,

झुंड रिपुमुण्डनके उग्र हार फरके।

भूखन भनट बाजे जीतके नगारे म्यारे

सारे करनाटी भूप सिंहल कों सरके ॥

नारे लगे शोणितके बहन पनारे लगे  
भारे लगे धमके सतारे गढ़ धरके ।  
बीजापुर बीरनके गोलकुंडा धीरनके  
दिह्ली उर मीरन के दाड़िमसे दरके ॥

- (b) ससि बिन सूनी रैन, ज्ञान बिन हिरदै सूनो ।  
कुल सूनो बिन पुत्र, पल बिन तरुवर सूनो ॥  
गज सूनो बिन दन्त, छलित बिन सायर सूनो ।  
विप्र सून बिन बेद, और बिन पुहुप बिहूनो ॥  
हरिनाम भजन बिन सन्त अरु, घटा सून बिन दामिनी ।  
बैताल कहै बिक्रम सुनो, पति बिन सूनी कामिनी ॥

- (c) हंस गमनि तुम नहिं बन योगू ।  
सुनि अपयश देहहिं मोहिं लोगू ॥  
मानस सलिल सुधा प्रातपाळी ।  
जियै कि लवन पयोधि मराली ॥  
नब रसाल बन विहरण शीला ।  
सोह कि कोकिल विपिन करीला ॥  
रहहु भवन अस हृदय विचारी ।  
चन्द्रवदनि दुख-कानन भारी ॥

2. Explain fully any two of the following :—

- (a) कारणते कारज कठिन होय दोष नहिं मोर ।  
कुलिश अस्थिते उपलते, लोह कराल कठोर ॥
- (b) गुरु विवेकसागर जग जाना ।  
जिनहिं विश्व करबदर समाना ॥  
मो कष्ट तिलक साज सजि सोज ।  
भा विधि विमुख विमुख सब कोज ॥
- (c) कहुं सुन्दरी नहात नीर कर-जुगल उछारत ।  
जुग अम्बुज मिलि मुक्त गुच्छ मनु सुच्छ निकारत ॥  
घोवत सुन्दरि बदन करन अति ही छवि पावत ।  
बारिधि नाते ससि कलङ्क मनु कमल मिटावत ॥

3. (a) Who were the speakers in Question 2 (a) and (b), and on what occasions were they spoken? Explain the allusions in Question 2 (a) and (c).

(b) Why were Sivi, Dadhichi, and Bali praised by Kaikeyi in extracting boons from King Dasaratha?

4. What was the interest of the Devas or gods in sending Rama to the forest? Describe in your own words the doings of Bharata after Rama left Ayodhya.

5. (a) Give the meanings of *six* of the following words :—

सिंहार्ही, पतियाहू, बियानी, सुपासू, तात, बागरु, सयाने, पयान, हुति, पुनीत, बहोरी, पुनि, ससुरारी, बसाइ ।

(b) Give the Sanskrit forms of *six* of the following words :—

नाह, नेह, मसान, गय, मोर, आगी, सिय, गुसाई, बखान, ठांच, पाहन, सहमि, चखपूतरि ।

(c) Explain *six* of the following expressions :—

(1) मानुष करनि मूरि । (2) काठ कठिनाई । (3) पूजि पारथी । (4) पन्थ दिखाई । (5) पायन लागा । (6) विश्व दरि जिमि तुम्हरे हाथा । (7) जानत तुमहिं तुमहि होइ जाई । (8) अमिय रसबोरी । (9) लोचन लाहू । (10) घात भलि फावी । (11) घरफोरि नाज । (12) रिपु होहिं पिरीते ।

### SIXTH PAPER

*The questions are of equal value.*

Examiner—MR. NALINIMOHAN SANYAL, M.A.

### FIRST HALF

Answer the FIRST and THIRD questions, and ONE of the remaining three.

1. Translate *one* of the following passages into English :—

(a) बच्चों के लिये जो दूध का अभाव है, वह केवल गौओं को कमी के कारण । हर साल बहुत सी गीएँ कटती जा रही हैं, और जो बचती भी हैं उनका पालन-पोषण अच्छी तरह से नहीं होता, तथा जो लोग गौओं को पालते हैं, वे उन्हें भर-पेट भोजन नहीं देते । साथ ही, एक बात और है—गौओं के चरने के लिये मैदान नहीं हैं, जहाँ उन्हें छहछही घास मिल सके । वे बेचारी इधर उधर कूड़ा इत्यादि चबाती फिरती हैं । भला, अपवित्र खाद्य से उत्पन्न दूध गुणकारी कैसे हो सकता है ?

(b) कलकत्ता-विश्वविद्यालय के अन्तर्गत पहले बंगाल आसाम तथा बिहार के कालेज थे । पर पटना तथा ढाका के विश्वविद्यालयों की स्थापना के बाद से अब कलकत्ते का काम कुछ सुगम हो गया है । परन्तु तब भी यहाँ के विद्यार्थियों की संख्या लगभग २०००० है । बंग-प्रदेश भरके कालेजों के



अतिरिक्त कलकत्ते में ही कितने कालेज हैं। भूतपूर्व वाईस-चान्सेलर सर आशुतोष मुखोपाध्याय बड़े ही विद्याप्रमी थे, और बंगाळी होते हुए भी उन्होंने ही पहले हिन्दी को उच्च परीक्षाओं में स्थान दिया था।

2. Give the substance of one of the following :—

(a) छोटे छोटे पत्ते मिलकर छाया सघन बनाते हैं।

सूत सूत मिलकर मदमाते हाथी को बँधवाते हैं ॥

एक एक करके ईंटों ने भी बाँध दिया पुल नदियों में।

हम तुम बिना एकता के उठ न सकते कभी वर्षों में ॥

(b) हे मातृभूमि ! तेरी सेवा सदा करूंगा।

अत ले चुका हूँ पक्का, इस्से न कभी टरूंगा ॥

जननी ! तेरे दुखों को नहीं देख अब सकूंगा।

तुमको सुखी करूंगा, रोके नहीं रुकूंगा ॥

3. Translate one of the following passages into Hindi :—

(a) Do you know what it is to be ill, and to lie tossing in your bed, hot and thirsty, with a pain that is hard to bear? Then your mother or some kind friend comes to your bedside and gives you a cool drink, gently strokes your hot head, and tells you that you will soon be well. This comforts you, and you are content to lie still, and bear your pain bravely, for you know that someone is caring for you, and trying to make you better.

(b) A king in the East was once in great need of a servant whom he could trust. After thinking for a long time, he made a plan by which he thought he could get one. He let it be known in the city that he wanted someone to do a day's work for him. Two men soon came, and said they were ready to do the work. So the king told them what wages they would have for working the whole day, and then gave each of them a basket. Each man was to take his basket to a well in the palace garden, and fill it with water.

4. Re-write the following correctly :—

(1) हम कल बनारस से आया है। (2) राम का घर में आजकल कोई आदमी नहीं है। (3) वह आदमियों ने राम को कल बहुत मारा था। (4) हमने राम को पूछा कि तुम कैसा है। (5) मास्टर साहब आज मुझे यहाँ आने को कहे थे। (6) आज बहुत गर्मी है, चलो हम बाग का ठंडा हवा खा जाऊँ। (7) राम की माता दश रुपैया भेजी है। (8) आज सबेरे मैं चाय गरम जलेबी खाये थे।

5. Re-write the following by putting in single words in each of the blanks :—

. मेदिनीपुर ज़िले — महीमपुर नाम — एक गाँव — निकट एक छोटी सी नदी बहती — । — गाँव — एक कड़का रहता — ।

उसका नाम अजित —। अजित का न तो बाप था, न कोई भाई, — कोई बहन। सिर्फ मा — महीमपुर — अधिकांश घर तांतियों के —। अजित — बाप भी, जब जीता —, तांती — काम करता —।

## SECOND HALF

*Examiner*—MR. NALINIMOHAN SANYAL, M.A.

*Attempt only THREE questions.*

1. What were the earliest literary compositions in Hindi? What were the subjects on which these were written? Who is regarded as the best writer of these? Name and give a brief description of the principal work he wrote.
  2. Give an account of the religious revival in Hindostan in the fifteenth and sixteenth centuries, and indicate the several channels in which it flowed with the literature which each channel gave rise to.
  3. Who, in your opinion, are the two greatest Hindi poets? Discuss their claims to the high places you assign to them. What were the names and subject-matters of their works?
  4. What do you know of Keshav Das, Bihari Lal, Dev Kavi, Padmakar, and Harischandra?
  5. Give an account of the rise and progress of Hindi prose literature.
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## INDIAN VERNACULARS—ORIYA (SUBSIDIARY)

## FIFTH PAPER

Examiner—PANDIT BINAYAK MISRA

*The questions are of equal value.*

1. Explain any three of the following extracts with reference to the context :—

(a) ଅସ ମା କରୁଣାମୟୀ ବଶଣୋଭାବଣୀ  
 ବରଜ ଏ ପ୍ରାଣେ ଅଳ୍ପ ବଶମ୍ଭର ବାଣୀ  
 ଫେଡ଼ି ଅଞ୍ଜଳର ଦ୍ଵାର  
 ଅଦମ ଅସ୍ୟ-ସଂସାର,  
 ତୋ ଅଦମ ଲୀଳାଭୂମି ଦେଖାଅ ମା ଅଣି,  
 ଦେଖୁ ସେହି ପୁଣ୍ୟାଲେଖ୍ୟ ଏ ପ୍ରାଣ ବଖାଣି ।

(b) ଏ କ୍ଷୁଦ୍ର ପ୍ରାଣର ପ୍ରେମ-ପ୍ରତିଦାନ  
 ପାଦପଦ୍ମେ ପ୍ରାଣ-ବଳ  
 ଅର୍ପଇଁ ଅନନ୍ଦେ ଦେନ ମହାପ୍ରଭୁ  
 ଦେନ ଏ ଦୁଃଖିର ଅଳ ।

(c) ଅନେକ ସମୟରେ ଏପରି ମଧ୍ୟ ଦେଖାଯାଏ ଯେ ଅମ୍ଭେମାନେ ଲେଖି ସପ୍ତମ ସ୍ଵର୍ଗର କଥା, ବାସ କରୁଁ ପୃଥିବୀର ଧୂଳିଭଣ୍ଡ ଉପରେ । ଯେଉଁ ଦେଶରେ ବାସ ସେହି ଦେଶର କଥା ଲେଖିଲେ, ତାହା ସ୍ଵାଭାବିକ ହୁଏ । ଯେଉଁ ବ୍ୟକ୍ତି ପ୍ରକୃତସ୍ଥ ସେହି ଏକା ଉପଯୋଗୀ ବିଷୟ ସ୍ଵାଭାବିକ ଭାବରେ ଲେଖି ପାରେ ।

(d) ଗୋଟିଏ ଅକାଳ୍ପା ଏକ ସ୍ଥାନରୁ ବାହାର ଦାବାଗ୍ନି ସଦୃଶ ଦେଶଯାକ ବ୍ୟାପିଯାଏ ଏବଂ ଭାଷାମଧ୍ୟରେ ଜୀବନ୍ତ ମୂର୍ତ୍ତି ପରିଗ୍ରହ କରି ସାହିତ୍ୟରୂପରେ ପ୍ରକାଶିତ ହୁଏ । ସାମୟିକ ଉଦାପନାରୁ ଏହାର ଜନ୍ମ ହୁଏ, ମାତ୍ର ଏହା ଯୁଗେ ଯୁଗେ ମାନବ-ପ୍ରାଣକୁ ସଂଜୀବିତ ଓ ଉଦ୍‌ଘାଟିତ କରେ ।

2. Give in Oriya the theme of ରୁଷିପ୍ରାଣେ ଦେବାବତରଣ occurring in the କୁସୁମାଞ୍ଜଳି.

Or,

Give a critical note in Oriya on any of the essays in the ବିଦ୍ୟା ପ୍ରବଳ.

3. Translate *any five* of the following sentences into Oriya :—

- (a) I shall tell you after I have seen the teacher
- (b) You saw me yesterday when I was going to the bazar.
- (c) I heard him telling a story.
- (d) He will come to me as soon as he reaches Calcutta.
- (e) The Headmaster had great trouble to get out the truth from the boy.
- (f) There will be no class to-day owing to the absence of the teacher.
- (g) Ram will remain here no longer.

4. Translate *any five* of the following sentences into English :—

- (a) ଯେବେ ତୁମେ ଆଜି ନକର ତେବେ ହରି ପଡ଼ିବ ନାହିଁ ।
- (b) ରାମ ସ୍କୁଲକୁ ଯାଉ ଯାଉ ବାଟରେ ଚିନ୍ତିଗଲା ।
- (c) ସେ ହାଟକୁ ଯାଉଥିବାର ମୁଁ ଦେଖିଥିଲି ।
- (d) ଆଜି କେଉଁ ଦିଗରୁ ମୋର ବାହାର ବର୍ଷିବ, ଜଣା ନାହିଁ ।
- (e) ମୁଁ ଏଣିକି କାହାରିକି ଆଉ ବନ୍ଧାସ କରିବି ନାହିଁ ।
- (f) ଦଳକୁଦନ ପିଲାଟି ଶୁଣି ଯାଉଛି ।
- (g) ବାଟରେ ନ ଯାଇ ଆଗବାଟରେ ଗଲେ କଷ୍ଟାକୁଦିବ ।

5. Frame sentences to illustrate two different meanings of each of the following words :—

ତେବେ, ଯେଣୁ, କଣି, and ବର ।

—

## SIXTH PAPER

Examiner—MR. PRIYARANJAN SEN, M.A.

*The questions are of equal value.*

1. Give an idea of the contribution made to Oriya literature by Sārālā Dās or Balarām Dās.
2. Write brief notes on any three of the following :—  
*Mathurā-Māṅgal, Geetābhidhān, Bhīmā Bhoi, and Rasa-Kalloḷa.*
3. Explain how Fakirmohan Senāpati is one of the originators of modern Oriya literature.
4. Decline ଏହା or ଅପଣ in the plural forms.
5. Correct or justify the following :—  
ବିଜ୍ଞାପ, ଦୁଶକ, ସାରକାନତା, ତଦାତ୍ତରକ୍ତ, ବଧବା .
6. What are the opposite words for ପୁରୁଷାର, ଅନୁର୍ଗତ, ଅବର୍ତ୍ତକ, ସମସ୍ତ, ପ୍ରସନ୍ନ, ସୁକର, and what is the difference between ଅସ୍ତନାୟକ and ଉପନାୟକ ?

## INDIAN VERNACULARS—MAITHILI (SUBSIDIARY)

## FIFTH PAPER

*The questions are of equal value.*

## FIRST HALF

Examiner—PANDIT BABUA MISRA.

1. Explain clearly any two of the following :—

(a) प्रभु कर परस धनुष टुटि गेल ।

शब्द प्रचण्ड भुवन भरि भेल ॥

फणिपति फण फट फट कय काट ।

कच्छप कछमच मानस आंट ॥

कलमलाय उटकाह वराह ।

कसमस कयल दशन निर्वाह ॥

दिग्गजचय कयलनि चितकार ।

सहि नहि सक महि बुर्भर भार ॥

ढगमग अवनी भङ्गुत लाग ।

सात समुद्र रहित मथ्यांव ॥

दिनकर रथहय त्यागल बाट ।

जय जय कर मिथिलेश्वर भाट ॥

- (b) भूखल छलहुं संग नहि खर्चा तोड़ि तोड़ि फल खयलहुं ।  
 रक्षक लण्ट प्राण लेवा पर बहुत नेहोरा कयलहुं ॥  
 कान कपार एक नहि बूझल पाते पात नुकेलहुं ।  
 अपन स्वरूप धयल हम सवकां कालक धाम पठौलहुं ॥  
 पहिने मारि बहुत हम सहलहुं पाछां अनुचित कयलहुं ।  
 दशमस्तक लङ्कापति राजा की अपने खिसिअयलहुं ॥  
 एक गोठ बानर पर एते सेना व्यर्थ पठयलहुं ।  
 घर्मशास्त्रवेत्ता अपने सन न्याय करू अगुतयलहुं ॥

- (c) कुलकलङ्गप्रद पुत्र कतहु जनु देधि विधाता ।  
 वरु जन सहथु विषाद रहथु बन्ध्या भय माता ॥  
 धिक अङ्गद युवराज तपस्वी दूत कहावय ।  
 जे मारल छल बालि तनिक जय सतत मनावय ॥

2. Explain fully, in English, any one of the following :—

- (a) माघव करिअ सुमुखि समधाने ।  
 तुअ अभिसार कयलि जत सुन्दरि  
 कामिनि करए के आने ॥  
 वरिस पयोधर धरनि वारि भर  
 रहनि महाभय भीमा ।  
 तइओ चललि धनि तुअ गुन मन गुनि  
 तसु साहस नहि सोमा ॥  
 देखि भवन भित्ति लिखल भुजगपति  
 जसु मन परम तरासे ।  
 से सुवर्दान कर झपटत कनि मनि  
 बिहुं सि आइलि तुअ पासे ॥  
 निअ पहु परिहरि संतरि विषम नरि  
 अंगिरि महाकुल गारी ।  
 तुअ अनुराग मधुर मद मातलि  
 किछु न गुनल वर नारी ॥

ई रस रसिक बिनोदक विन्दक

कवि विद्यापति गाबे ।

काम प्रेम दुहु एकमत भय रहु

कखने की ने कराबे ॥

(b) माधव कि कहब तोहरो गेयाने

सुपहु कहलि जब रोष कयल तब

कर मूनल दुहु काने ॥

आयल गमनक बेरि न नीन टरु

ते' किछु पुछिओ ने भेला ।

एहनि करमहिनि हम सनि के धनि

करसँ परसमनि गेला ॥

जौँ हम जनितहुँ एहन निदुर पहु

कुच कञ्चन गिरि साधी ।

कौसल करतल बाहुलता लय

हठ कय रखितहुँ बाँधी ॥

ई सुमिरिय जव जौँ न मरिय तब

बुझि पड़ हृदय पषाने ।

हिमगिरि कूमरि चरन हृदय धरि

कवि विद्यापति भाने ॥

3. Sketch the character of युधिष्ठिर । Criticise his epithet "धर्मराज" ।

## SECOND HALF

Examiner—PANDIT BABUA MISRA.

4. Give the substance of any two of the following :—

(a) हरि हरि विलसि विलासिनि रे लोचन जलधारा ।

तिमिर चिकुर धन पसरल रे जनि विजुलि अकारा ॥

नीलवसन तन वेधल रे उर मोतिक हारा ।

सजल जलद कत झांपव रे, उगमग कर तारा ॥

उठि उठि खसय कत योगिनि रे, विछिआ युग जाती ।

पवन पटल पुन आबोत रे, जनि भादव राती ॥

यामिनि सभके' वरननि रे, विरहिन थिक वाना ।  
सभसँ वड़ थिक अनुभव रे, धीरज धर रामा ॥

- (b) तुभ विनु आज भवन भेल रे घन विपिन समान ।  
जनु ऋधि सिधिक गरुभ गेल रे मन होइछ भान ॥  
परमेश्वरि महिआ तुभ रे शिव विधि नहि जान ।  
मोर अपराध छमव सब रे नहि' याचव आन ॥  
जगत जननिकां जग कह रे जन जानकि नाम ।  
नैहर नेह नियत नित रे रह मिथिलाधाम ॥  
शुभमयि शुभ शुभ सभ दिन रे थिर पति अनुराग ।  
तुभ सेवि पूरल मनोरथ रे हम सुखित सभाग ॥

- (c) धान जरिजाय तौ वनाय खरिहान की हो  
पान सड़िजाय जौ तौ जरदे वचौने की ।  
की हो परयइ जौ न वाला निशि अइ लागै  
पइ लागै देहमे' तौ गरदे वचौने की ॥  
विरचि आराम की जौ आम-तरु काटि फेंकी  
खेत जौ निलाम हो तौ वरदे वचौने की ।  
'सीताराम' गुसरूप घरमे' कुकर्म हो, अरु  
लुस सब धर्म हो तौ परदे वचौने की ॥

5. Translate, into English, any one of the following :—

(a) दिनेश बाबू भोज खायकें डेकरैत चल अबैत छलाह । रौद छलैक तेज, खयने छलाह नांक सांक कं कं, अबैत छलाह रौदमु'हा कि सुनलैन्ह बांसक बीट दिश टेंगारीक आवाज । लगलैन्ह सन्न द । बांस क्रटनिहारकें गरिअबैत बीट दिश दौड़लाह । “चोर सहे इजोत” ? ओहो लेलक लंक । देल तौ ई भारी रेवाड़ी, मुदा फल भेलैन्ह किछु नहि', इयैह ले, बैह ले ओ पार भय गेल ।

(b) ई सर्वसम्मत विषय अछि जे समयानुसार कार्य करवाक चाही । सम्मान्य वेलेक कार्य कयने कोनो देश, जाति वा समाजके सफलता सम्पास होएव असम्भव । कोनो देश, जाति वा सामाजिक एक व्यक्ति केइनो परिश्रमरे देश वा समाजक सुधार वा उद्धार नहि' भयसकै, कारण “एसकर बृहस्पतियों फूसि” । किन्तु वैह कार्य जे अनेक व्यक्ति सहयोगितासँ सम्पादन हो तँ सफलताक लोबहो आना आशा ।



6. Translate the following into Maithili :—

It is a common saying that "manners make the man" and there is a second that "mind makes the man"; but truer than either is the third that "home makes the man." For home-training includes not only manners and mind but character. It is mainly in the home that the heart is opened, the habits are formed, intellect is awakened, and character moulded for good or for evil.

### SIXTH PAPER

*Examiner*—PANDIT BRAJAMOHAN THAKUR, M.A., B.L.

*The figures in the margin indicate full marks.*

### FIRST HALF

(Only THREE questions are to be attempted.)

1. "The plural number of nouns in Maithili is simply formed by the addition of a noun signifying multitude." Discuss fully and critically, and show by illustrations. 16½

2. (a) Frame sentences to use (i) चपने, (ii) चढ़ी, (iii) ढ़, and (iv) दू, with verbs in the Imperative forms, and show peculiarities in their application. 16½

(b) Decline "कू" in Non-Honorific Singular form and in Honorific Plural form.

3. How Comparative and Superlative degrees (Adjective) are formed in Maithili? Frame sentences to illustrate them. Has Sanskrit language in any way influenced the Maithili in this connection? Give feminine of "सन्दर" and the rule that generally guides such cases. 16½

Or,

Give the opposite gender of :—

'उजर'; करिकी; पीरा; गोर; गोली, बुधिआर; सुघड़, बौक बकलेरुह । बैटा; हरिआर, लाछ ॥

4. Frame sentences to show the difference in the application of any six of the following :— 16½

- (1) देखैत छलाह ।
- (2) देखैत छल ।
- (3) देखैत छलयुनिह ( or देखैत छलयीनिह ) ।
- (4) देखैत छलहक ।
- (5) देखैत छलहीक ।
- (6) देखैत छले ।
- (7) देखैत छलौ ।
- (8) देखैत छलौ ।
- (9) देखैत छलिय ।

5. Give rules for forming Active (सकर्मक) and Causal (परिचायक) verbs from Neuter (अकर्मक) verbs. 16½

## SECOND HALF

*Examiner*—PANDIT BRAJAMOHAN THAKUR, M.A., B.L.

(Only THREE questions are to be attempted.)

1. "The four personal forms of the Transitive verbs exhibit to a wonderful degree the luxuriance of the Maithili language. They depend not only on the subject but on the object of the verb." Discuss the above statement of Dr. Grierson by examples. In this connection show the difference on the point with other language which you have taken for the principal subject (Hindi or Bengali, etc. etc.). 16½
  2. Discuss generally the influence of *Brajabhasa* and Persian on the vocabulary and on the grammar of Maithili language. 16½  
 Illustrate by examples.
  3. Discuss generally the part played by Maithili in the formation of other Indian language or languages. 16½
  4. Discuss the position of Vidyapati Thakur in Maithili literature and also his influence on the *Vaishnava* literature of Bengal. 16½
  5. Name any three important writers in Maithili and give a short literary history of them each. 16½
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## INDIAN VERNACULARS—GUJARATI (SUBSIDIARY)

## FIFTH PAPER

*Examiner*—PANDIT HARGOVIND DAS SETH*The figures in the margin indicate full marks.**Answer the FIRST THREE questions and ANY TWO of the remainder.*

1. Translate into English :—

90

ઉપનિષદ્માં એક આખ્યાયિકા છે કે નચિકેતાના બાપે યજ્ઞ માંડયો. યજ્ઞમાં ગાયનાં દાન કરવાં ભેઈએ—તેમાં તેણે ઘરડી, દુબળી અને સૂકેલી ગાયોનાં દાન કરવા માંડ્યાં! એ દાન વળે ખરાં! નચિકેતાએ વિચાર કર્યો કે પિતા દેવને ફેસલાવેછે. તેથી એમનો યજ્ઞ અદ્વળ જશે અને પાપ લાગશે. તેથી તેણે બાપને કહ્યું—“પિતાશુ! શાસ્ત્રમાં ગાયો આપવાની કહીછે—પણ તે શું સામાને ભારૂંપ થાય તેવી? માટે આવી ગાયો આપોછો તે કરતાં તો ન આપો તે વધારે સાફ.” આ સાંભળી પિતા ગુસ્સે થયો અને બોલ્યો—“લાવ ત્યારે, હું તનેજ યમદેવને આપું.” એમ કહી એ કૂર પિતા પોતાના પુત્રને યમદેવને આપવા તૈયાર થયો! છતાં પણ પુત્ર ડગ્યો નહિ. અને યમદેવ પાસે જઈ એમને પ્રસન્ન કરી વરદાન મેળવ્યાં; તેમાં એણે પિતાનો અપકાર ભૂલી જઈ પિતાની કૃપા માગી, તથા પ્રભુની સેવાનું તથા પ્રભુના સ્વરૂપનું જ્ઞાન માગ્યું.

2. Translate into English or into Bengali:

80

(a) હુસેનખાં ઉઠવાળાને બપોરે એક રાણના ઝાડ તળે ઠંડકમાં સૂતા હતા. એટલામાં ઝાડ ઉપરથી પક્ષીએ બે ચાર રાણેા એમની પાસે પાડી, મીઝાંને એ ખાવાનું મન થયું, પણ કેણુ લાંબો હાંથ કરીને લે? એટલામાં એક વટેમાર્ગુ. ઉંટ ઉપર બેશીને જતો હતો તેને બેઠ હુસેનખાંએ ટોકાં કર્યો: “અબે ઉંટવાલે! જરા નીચે ઉતરકે મેરે મૂંઝે ચે ખિત્તી (રાણુ) ડાલ તો સહી, “ઉંટવાળાને મીઝાંનું આળસ બેઠ માંહેથી હસવું આવ્યું, અને જવાબ દીધો: “મીઝાં ઉંટ ઉપરથી હું તો કાંઈ ઉતરતો નથી.” મીઝાં બોલ્યા: “અબે! તું તો બડા એદ્દી માલૂમ હોતા હૈ!” ઉંટવાળાથી મનમાં હસીને બોલ્યા વિના રહેવાયું નહિ કે “એદ્દી તે હું કે તું?”

(b) પટક માયા પરી, અટક ચરણે હરી,  
 વટકય મા વાત સુણતાંજ સાચી;  
 આશનું લવન આંકાશ સૂધી રચ્યું,  
 મૂઠ એ મૂળથી લીંત કાચી,      ધ્યાન૦  
 અંગ બેળન ગયું, પલિત પિંજર થયું,  
 તોય નથી દહેતો શ્રીકૃષ્ણ કહેવું;  
 ચેત રે ચેત, દિન ચાર છે લાલના,  
 લીંબુ દહેકાવતાં રાજ લેવું.      ધ્યાન૦

3. Write in your own words in Gujarati any of the stories 20  
 you have read about ઉંદોગ .

4. Explain the following words and use them in your 15  
 own sentences:—

દેશવટો, અંધાધુધી, જગીરદાર, આડોશીપાડોશી,  
 સુસ્મામાન, વણુઆરો.

5. Give an estimate of one of the following poems :—

16

7. Give an estimate of one of the poets you have read, quoting if possible from his poems. 16

### SIXTH PAPER

*Examiner*—DR. I. J. S. TARAPOREWALLA, M.A., PH.D.

*The questions are of equal value.*

*Answer the WHOLE of Section A and TWO THREE out of Section B.*

#### A

1. Translate into English (or Bengali or Hindi) any two of the following passages :—

(a) “કાકા સાહેબનું એક વાક્ય ઘણું ઇલાદ આવે છે ‘હિંદ-માતા પારકાં પાણી ભરે છે’ આ વાક્ય તેમણે તો સૂત્ર રૂપે લખ્યું, પણ તેનો અર્થ ભારે ઉડા છે હિંદ માતા એટલે હિંદુસ્તાનના લોકો; અને હિંદુસ્તાનના લોકો એટલે ખેડુતો અને ખેતીના અંગના મજૂરો. જે પ્રજાનો ૮૦ ટકા ઉપરનો ભાગ પ્રત્યક્ષ અગર પરોક્ષ રીતે ખેતીના ધંધામાં પડેલો છે તે જ. હિંદુસ્તાનની પ્રજા અત્યારે કંઈ દશામાં છે તે તપાસો. તપાસતા માલુમ પડે છે કે તે પરદેશીઓને ત્યાં વેચાણ છે. પરદેશીઓને શું જોઈએ છે તે મુખ્ય વાત, અને પોતાને અને પોતાના છોકરાંને શું જોઈએ છે તે ગૌણ વાત થઈ પડી છે”

(b) સપૂત તેર કહેવાય, જે સીધે માર્ગ ચાલે  
સપૂત તેર કહેવાય, અધર્મને જે ટાળે  
સપૂત તેર કહેવાય, જે સ્વજનને સુખ આપે  
સપૂત તેર કહેવાય, દીનના દુઃખડા કાપે  
વળી સપૂત તેનું નામ છે જેણે પ્રભૂને પ્રીતે અરચીયા  
સામળ કરે સપુત નરે, દામ પરમારથ ખરચિયા.

(c) રસ્તામાં એંસી વરસની એક ડોસી મળી તેને ગાંધી-જીના ચરણમાં રૂપીઓ એક ધર્યો અને પ્રણામ કરીને કહ્યું “ગાંધીજી સ્વરાજ લઇને વહેલા વહેલા આવજો”. માતાના આશિર્વાદ ક્રમે .

2. Write a story from Nitisikshan (નીતી શિક્ષણ) that you like most in English.

B.

3. Translate into Gujarati :—

There is a time for everything  
A time for work, a time for play  
Who does all things at the right time,  
Will happy be all day.

4. Write a short note on મીરા .

5. What do you know of *two* of the following ?—

દલપત, કલાપી, અને અખો .

6. Give the Gujarati for :—

I eat. You eat. He eats. He will go. He should go.  
You must do it. It is your duty to help your family. I wish  
your success. She is very kind.

7. Give the English for :—

નિમક-હલાળ, પારંગત, સ્નાતક, સત્યાગ્રહ, સ્વરાજ,  
કંબૂસ, ધર્માત્મા, મહાત્મા, સત્સંગ, અનુમાન .

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## INDIAN VERNACULARS—SINHALESE (SUBSIDIARY)

## FIFTH PAPER

Examiner—REV. P. SEELANANDA

The questions are of equal value.

## FIRST HALF

Answer ANY THREE

1. Translate into English :—

(a) පිත්තද පුතුව පියයන් ලදුවත්ත.  
 ගුණානු ලොප් පුත්‍රපුත්‍රයෙකු  
 එකපුත් පුත්‍ර දිගු ගුණානු ලොප්  
 ගුණානු ලොප් පුත්‍ර පුත්‍රයෙකු

(b) කො කොත් ගුණානු ලදුවත් පුත්‍ර  
 පුත්‍ර දිගු ගුණානු ලොප් පුත්‍ර  
 කො කොත් පුත්‍ර, පුත්‍ර පුත්‍ර  
 පුත්‍ර ගුණානු ලොප් පුත්‍ර

පුත්‍ර ගුණානු ලොප් පුත්‍ර පුත්‍ර

2. Explain in English

පුත්‍ර පුත්‍ර, පුත්‍ර පුත්‍ර, පුත්‍ර පුත්‍ර  
 පුත්‍ර පුත්‍ර, පුත්‍ර පුත්‍ර, පුත්‍ර පුත්‍ර  
 පුත්‍ර පුත්‍ර, පුත්‍ර පුත්‍ර, පුත්‍ර පුත්‍ර  
 පුත්‍ර පුත්‍ර, පුත්‍ර පුත්‍ර, පුත්‍ර පුත්‍ර

3. Give a short description of the colonisation of Ceylon by Prince Vijaya.

4. What do you know about civic administration during the reign of King Pandukabhaya?

5. Decline the following words :—

(a) විනුර. (b) ලොප්.

## SECOND HALF

Answer ANY THREE

1. Translate the following into English :—

අමරකන්ත ආරාමයෙහි දිනකරෙකු  
 ප්‍රේමකන්ත ගිවිසුණු මොල්ලෙහි පුත්  
 මුදුල, සුමනෙහි සුමනෙහි  
 විදේහෙහි දිනල, බෙරයෙහි බෙරය  
 බෙරයෙහි පුත්, බෙරයෙහි පුත්

2. Give a short sketch of the life of Buddha as given in " Amawatura "

3. Explain the following :—

සත චතත පත බෙර සත සත සත  
 අතතත පුර බතතත තතත පුර  
 දිගුතත ගිල දිල පුල බතත පුර  
 සතපත. සත සත පත සත පතතත ද

Give meanings of the following words  
 අතතත, අතතත, බතතත පුර, පුර.  
 තත, සත, පත, තතතත

5. Write notes on the following :—" Brahmajala Sutra " and " Ambatta Manawo."





## INDIAN VERNACULARS—TAMIL (SUBSIDIARY)

## FIFTH PAPER

Examiner—VEDANTAVISARAD N. S. ANANTAKRISHNA SASTRI

*The figures in the margin indicate full marks*

1. Comment upon the following sentences, pointing out their grammatical peculiarities :— 10

அயோத்யா என்பது ஒரு பட்டணம். தசரதர் அதை ஆண்டு வந்தார். அவள்முதுகு வளைந்திருக்கும். அதனால் அவளைக் கூனி என்பார்கள். அவளை ஸ்ரீராமர் பரிகாசம் செய்வார்.

2. Re-write the following passage in short simple sentences :— 10

தசரதரின் வேறொரு மனைவி கௌசல்யுடைய புதல்வன் ஸ்ரீராமசந்திரனிடம் கைகேயி பிரியமுள்ள வளாயிருந்தாள்.

3. Frame three short sentences in Tamil, using the following terms : (1) Comparative degree, (2) Infinitive mood, (3) Verbal participles. 20

4. Write a letter to your father stating your progress in study. 15

5. Write a story in Tamil from the portions you have read. 20

6. Decline and conjugate the following nouns and roots (in Past tense) respectively :— 15

(1) வீடு, (2) காறு, (3) மகன், (4) பசு,  
(5) பாலம், (6) காது, (7) நான், (8) அவை.

(1) காட்டு, (2) போ, (3) வா, (4) காண்,  
(5) பாடு, (6) படி, (7) படு.

7. Join the Sandhis of the following :— 10

(1) நல் + நிலம். (2) கல் + கண்டு. (3) பொன் + தகுடு. (4) கல் + ஐ. (5) நான் + தோறும்.

## SIXTH PAPER

Examiner—VEDANTAVISARAD N. S. ANANTAKRISHNA SASTRI

*The figures in the margin indicate full marks*

1. Prove that Tamil is an independent language, stating reasons and citing examples in support of your answer. 16
2. State how many divisions are there in Tamil and when did it derive influence from Sanskrit. 16
3. Show whether Northern languages have got any influence over Tamil. 16
4. Derive and state how the following came into usage in Tamil :— 16

- (1) அரவம், (2) பாண்டியன், (3) சூத்திரன்,  
(4) தமிழ், (5) தமிழ்.

5. Translate the following passage into Tamil :—

20

Let me have a pencil. I will visit Delhi. Birds sing songs. The boy lost a book. We started for school. He entered my garden. God save the king. Long live the Emperor of India. May you be happy! He did pass the examination. We could not catch the train. We tried, therefore, to hire a conveyance. We hoped by this means to reach home. He recovered from his illness. The recovery was gradual. I had gone down the lane half-way. I found a constable beating a young man. Nothing could make him angry. He is a good and sensible man.

6. Translate the following into English :—

20

அங்கம் என்பது ஒரு தேசம். ரோமபாதர் அதற்கு ராஜா. ஒரு காலத்தில் மழையில்லாமலிருந்தது, ஆறுகளில் ஒட்டம் இல்லை. குளங்கள் வற்றின. கிணறுகள் பாழாயின. உஷ்ணம் அதிகரித்தது. ஒரே தாபம், உண்ண உணவு இல்லை, குடிக்க நீர் இல்லை. சுகம் இல்லை. ராஜா ரிசியசிருங்கமுனிவரை நாட்டுக்கு வாவழைத்தார். மழை பெய்தது, ஷேமம் பிறந்தது. பஞ்சம் துலைந்தது.

## INDIAN VERNACULARS—MALAYALAM (SUBSIDIARY)

## FIFTH PAPER

Examiner—RAO BAHADUR L. K. ANANTAKRISHNA IYER, B.A., L.T.

*The questions are of equal value.*

1. (Answer the question in Malayalam.) Why is the Lion called the king of beasts?

2. What are the uses of the cocoanut tree?

3. Translate into English the following verses :—

ആറുമാസം പക്ഷ ബാലനായ ഉന്നാഥം,  
 കൂറുള്ള മാതാവു വേച്ചിട്ടിരിക്കവെ,  
 വേടൻ വരുന്നതുകണ്ടുയെപ്പെട്ടു,  
 കൂടയുള്ള മുഗങ്ങൾ മണ്ടിനാർ,  
 ഓടവാൻ വയ്യാഞ്ഞുഴലുമെന്നെതദാ,  
 വേടൻ പിടിച്ചുക്കൊണ്ടു പോയിടിനാർ.  
 കേടുവരുത്താതെ കൊണ്ടുചെന്നാദരാൽ  
 നാടുവാഴിക്കവൻ കാഴ്ചവെച്ചീടിനാൻ  
 ആടു പശുക്കളും രാത്രൗ വസിക്കുന്ന  
 കൂടു തുറന്നതിലാക്കിനാൻ മന്നവൻ.

4. Give the meaning of the following words :—

ദിനപ്രതി, പാശങ്ങൾ, ഗജിക്കുവെരൂവ്യം,  
 ഹിമകണങ്ങൾ, മാദ്ദവം, ശാഖ.

5. Give the സമാസം's of the following :—

അഗ്നിജ്വാല, മാജാരവക്ത്രം, സൂര്യകാന്തി പട്ടം,  
 പൂവുരൂപം, അല്പപ്രാണി, വൃക്ഷ ശാഖ.

6. (a) Decline the word ശാഖ, നാണയം.

(b) Give the past tense of the following verbs :—

വിവരിക്കുന്നു, എഴുതുന്നു, നോക്കുന്നു ചെയ്യുന്നു.

(c) Give the plural number of the following words :—

ആന, വികാരം, വേടൻ, പാശം, ജ്വാല, ഭുജം.

## SIXTH PAPER

*Examiner*—RAO BAHADUR L. K. ANANTAKRISHNA IYER, B.A., L.T.

*The questions are of equal value.*

1. State what you know about the origin and early history of the Malayalam language.
2. What are the four epochs into which the Malayalam literature is divided? What are the distinguishing features of each period?
3. Mention two of the great Malayalam poets. Write a short account of the life-history of one of them.
4. Write a brief history of the Malayalam drama. Give the names of a few of the Malayalam dramas.
5. Give a short account of the part played by Rājā Rājā Varma in the field of Malayalam literature.
6. When did the prose fiction begin in the Malayalam literature? Give the names of three of the classical works.

## INDIAN VERNACULARS—URDU (SUBSIDIARY)

## FIFTH PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner*—KHAN BAHADUR SHAMSUL-ULAMA HIDAYET HOSSAIN

(UNSEENS)

1. Translate into English :—

A.

15

خلیفہ ہارون الرشید اکثر رات کو اکیلا بھیس بدل کر  
شہر بغداد میں پہرا کرنا - ایک دن اس نے اپنے وزیر  
جعفر سے کہا کہ آج رات کو میں شہر کی سیر کو نکلونگا  
میں معلوم کرنا چاہتا ہوں کہ میری رعیت کس حال  
میں ہے اور تہانیدار کیسا کام کرتے ہیں - اگر انکا کام  
اچھا دیکھونگا تو انکو انعام دونگا اور اگر ڈھیلے پالے جائینگے  
تو انکی جگہ دوسروں کو مقرر کرونگا - غرض رات کو خلیفہ  
اپنے وزیر کو ساتھ لیکر نکلا - دونوں نے ایسا بھیس بدلا  
تھا کہ کسی طرح پہچانے نہیں جاتے تھے - پھرتے پھرتے  
وہ ایک تنگ گلی میں پہنچے - چاندنی میں ایک شخص

دکھائی دیا جسکا قد لمبا تھا اور ڈاڑھی سفید تھی۔ جال سر پر اور ٹوکرا کندھے پر دھرے ہوئے لائھی ٹیکٹا چلا جانا تھا۔ خلیفہ نے کہا یہ شخص بہت غریب معلوم ہوتا ہے \*

B.

15

علی بابا گھر پہنچکر گدھوں کو اپنے مکان کے اندر لیگیا اور باہر کا دروازہ بند کر کے اوپر کی لکڑیا اٹاریں اور پھر اشرفی کی تھیلیوں کو اٹار کر اپنی بی بی کے پاس لیگیا۔ بی بی کو شبہ ہوا کہ یہ اشرفیاں کہیں سے چرا کر لایا ہے۔ اپنے شوھر سے کہا تم نے یہ بہت برا کلم کیا۔ علی بابا نے کہا میں نے چوری نہیں کی۔ پھر اس نے سب حال شروع سے اخیر تک بیان کیا وہ سدکر نہایت خوش ہوئی اور اشرفیوں کو گننے لگی۔ علی بابا نے کہا تم کہاں تک گنوگی۔ میں ایک خندق کھود کر اس خزانے کو گارتا ہوں بی بی نے کہا بہت اچھا مگر میں اسکا اندازہ کرنا چاہتی ہوں کہ یہ کتنی اشرفیاں ہیں۔ میں انہیں تول کر دیکھونگی علی بابا نے کہا تمکو اختیار ہے مگر خبردار یہ بات کسی کو معلوم نہو \*

(PRESCRIBED TEXTS)

2. Translate into English :—

15

اجل سر پر آپہنچی تمام لینا لوٹا مارا پڑا ای کش میں کچھ نہیں تو دس بارہ برس ہی اور جی جاتا تو یہ سب انتظام اپنی خواہش کے مطابق درست کر لیتا بال بچے بھی ذرا اور سیانے ہو جاتے اور کھانے کمانے لگتے ادھر انکی شادی بیاہ کرچکتا گاؤں کا معاملہ بھی در براہ ہو جاتا۔ مکان کو اپنے طور پر بنا لیتا لوگوں کا حساب کتاب سب صاف کر دیتا گھر والی کے واسطے کچھ ذخیرہ

ذاتی فراہم کر جاتا تب فراغت سے مرنا کیا مرنے میں  
مجبور کچھ عذر یا خدا نخواستہ کسی طرح کا انکار تھا یا  
میں اتنی ذرا سی بات نہیں سمجھتا کہ دنیا میں آکر  
مرنا ضرور ہے مگر ہر چیز ایک وقت مناسب پر ٹھیک  
ہرتی ہے یہ بھی کوئی مرنا ہے کہ ہر ایک کام کو ادھورا  
ہر ایک انتظام کو ناقص و ناتمام چھوڑ کر چلا جاؤں \*

3. Frame sentences, using the following:—

8

بلی کے بھاگ چھینکا ٹوٹا - اونچی درکان پھیکا پکوان  
اونٹ کے منہ میں زبرہ - برے بول کا سر نیچا - رینگتے  
کھڑے ہونا \*

#### SECOND HALF

Examiner—KHAN BAHADUR SHAMSUL-ULAMA HIDAYET HOSSAIN  
(PRESCRIBED TEXTS)

1. Translate into English:—

18

اسی پر ہمیشہ بہرہ ور کر تم  
اسی کی سدا عشق کا دم بہرہ تم  
اسی کے غضب سے دور جب دور تم  
اسی کی طلب میں مر رہے مر رہے تم  
مبرا ہے شرکت سے اسکی خدائی  
نہیں اس کے آگے کسیکو بڑائی  
خون اور انداک رنجور ہیں دان  
مہ و مہر ادنیٰ سے مزدور ہیں دان  
جہاندار مغلوب و مقہور ہیں دان

نبی اور صدیق مجبور ہیں دان  
نہ پرسش ہے رہبان و احبار کی دان  
نہ پروا ہے ابرار و احرار کی دان

2. Explain fully in Urdu:—

18

(i) باغ طلسم چہرہ رنگین ہے یار کا  
رہتا ہے چار فصل میں موسم بہار کا

- (ii) چمن سے بلبل رقمري کا عشق حيرت ہے  
 ثبات گل کو نہيں سرور کو قيام نہيں  
 (iii) مرتے هيں آرزو ميں مرنے کي  
 موت آتي ہے پر نہيں آتي

8. Give the meanings of :—

10

صوت - مبرا - رنجور - تمدن - نوع - خرد - ملجاء  
 معيشت - ماری - مس \*

4. Write notes on :—

10

فاران - عزتي جبرالتر - حمرا - بوقبیس

### SIXTH PAPER

### FIRST HALF

Examiner—MAHAMMAD ISHAQUE, M.A., B.Sc.

### (ELEMENTS OF GRAMMAR)

The figures in the margin indicate full marks.

1. What are the different rules of distinction of gender in Urdu? 12
2. Mention the different tenses where نے is used and show its effects on the gender and number of verbs. 12
3. Give the genders of :— 10

ناک - سرک - فغان - زبان - تعريذ - وقت - شربت -

گہی - درا - مزاج \*

4. (a) Give the Urdu plurals of the following words :—

6

سُرک - راہ - گہر - کتاب - موتی

- (b) Fill up the blanks :—

10

\_\_\_\_\_ ميں \_\_\_\_\_ حضرات \_\_\_\_\_ عنايت \_\_\_\_\_ شکرِہ \_\_\_\_\_  
 کرتا ہوں کہ آپ \_\_\_\_\_ اس جلسے کي صدارت کا \_\_\_\_\_  
 مجھے عطا \_\_\_\_\_ ارر میرمی اس \_\_\_\_\_ کو نہایت \_\_\_\_\_ کیساتھ  
 سکر مجھ پر \_\_\_\_\_ فرمایا \*



## SECOND HALF

*Examiner*—MAHAMMAD ISHAQUE, M.A., B.Sc.

## (PHILOLOGY)

1. Write philological notes on *any four* of the following words :— 8  
 نیلام - آئینہ - ناخدا - ہاتھی - گائے - دانت
2. Derive *any four* of the following words :— 8  
 مردمک - درد ناک - دلنشین - بوستان - کوهسار - رھنما -  
 آھنگر \*

## (HISTORY OF LITERATURE)

1. Trace the origin and growth of the Urdu language and literature. 11
2. Give a short account of the life of Hali and mention the characteristics of his poetry. 12
3. Compare Anis and Dabir as Marsiya writers. 11

## INDIAN VERNACULARS—MARATHI (SUBSIDIARY)

## FIFTH PAPER

*Examiner*—DR. SURENDRANATH SEN, M.A., PH.D., B.LITT.*The questions are of equal value.*

1. Translate into your own vernacular :—

युरोपीयन शिक्षकांस आपलें कर्तव्य आपल्या नवीन व प्रगमनशील संस्कृतीचे पुरस्कर्ते या नात्यानें करावयाचे असतें। अथांत त्यांना आपल्या कामाचें महत्त्व व आपली जबाबदारी ओलखूनच काम केलें पाहिजे। आणि तोच नियम इकडोळ आपल्यामधीलु तयार झालेल्या शिक्षकांस लागू। इकडे प्रथम प्रथम आलेले युरोपीयन प्रोफेसर लोक फार उत्तम पैकीं असत। हांवर्ड, ग्रॅंट, पुण्याचे मेजर कंडी वगैरे हरएक इष्टीनें पहिल्या नंबवचे अध्यापक होते। यामुळे इकडे प्रथम तयार झालेले नवीन पद्धतीचे शिक्षक जे निघाले ते देखील उत्तम पैकींच होते। आणि त्यांनीं पहिल्या कांहीं पिढ्यांतील विद्यार्थ्यांना चांगली शिक्षा व वळण लावण्याचा प्रयत्न केला।

2. Explain clearly the following extracts :—

(a) नाही संतपण मिलत हें हाटीं ॥  
 हिंजतां कपाटीं रानीं वनीं ॥  
 नये मोळ देतां धनाचिया राखी ॥  
 नाही तें आकाशीं पाताळीं तें ॥

- (b) जरी झाळा भाग्यवंत ॥  
 तरी का भेटेल भगवंत ॥  
 उंच वाडला परंढ ॥  
 तरी का होईल ह्मणुवंढ ॥  
 जरी गर्दभ वेगीं घावे ॥  
 तरी का अन्ध-भोल पावे ॥

3. What forms in your opinion the special feature of Raghunath Pandit's गलदमयंती स्वयंवरा-स्थान ?

4. Amplify the meaning underlying the following :—

- (a) जिवळ्या जिव घेती प्रेत सांडोनि देती ॥  
 विषय सकळ नेती मागुना जन्म देती ॥  
 (b) दिसंदीस आयुष्य हें व्यर्थ छोटे ॥  
 उदासीन हा काल कोठें न कटे ॥

5. Explain the teaching of Ramdas as expounded in your text book.

#### SIXTH PAPER

*Examiner*—DR. SURENDRANATH SEN, M.A., PH.D., B.LITT.

*The questions are of equal value.*

1. Trace the origin of Marathi language.
2. Indicate the influence of non-Indian languages on Marathi language and literature.
3. Give a brief account of the life and writings of Eknath.
4. Estimate the literary achievements of Vaman Pandit.
5. Illustrate how negative forms of a verb in the present, past and future tenses may be produced by employing the negative forms of the verbs चसणे and होणे.

6. Form short sentences with the following words :—

सारखा, आपणपोटी, जात्या, यजमान, याज्ञा, अरेराव, अर्वाचीन, तलमळ ।

#### INDIAN VERNACULARS—BASIC LANGUAGES

(PALI)

#### SEVENTH PAPER

*Examiner*—MR. SAILENDRANATH MITRA, M.A.

[Full marks—50.]

*The figures in the margin indicate full marks.*

1. What are the claims of Pali to be regarded as "basic" in relation to Indian Vernaculars? Give your answer with illustrations. 10

Or,

Estimate the value of the Pali Birth Stories as illustrative exposition of popular Buddhism.

2. Sum up Nagasena's reply to one of the following questions, together with the similes employed and adding your own observations on the subject-matter :—

8

(a) *Yo uppajjati so eva so udāhu añño ti.*

(b) *Ko paṭisandahaṭṭi ti.*

3. Translate into English or your own Vernacular *four only* of the following extracts (*two* from Group A and *two* from Group B), adding philological notes where necessary :—

16

## A.

(a) B dhiṣattassa Gaṇḍāva paṇḍiyam pivitvā Gaṇḍātīre nisinna-kāle santikam gantvā evam āha : "vānarin la, imasmim paṇese kasaṭṭa-phalāni khādanto kim tvam ciṇṇatthāne yeva carasi, pāra Gaṇḍāya ambalabujāṭṭham madhuraphalānam anto natthi, kin te tattha gantvā phalāphalam khādītum na vatṭati" ti.

(b) Manussā tam diṣvā somanassaṭṭhā "etaṃ ayyo sobhaggaṇṇat-tam susikkhitasakunaraṇānam amlākamdetṭhā" ti āham u. "Amhehi paṭhamam kāko añño tam gacchittha. idāni eṇam morarāṇānam ānayimha. etaṃ pi yācatha, tumbākam ratṭhe sekunam nāma gahetvā āgantum na sakkā" ti.

(c) Pādā udakamhi na osidimsu. So paṭhavītale gacchanto viya vemaṇṇham parakāle vici paesi. Ath'assa Buddhārammaṇā piti mandā jātā. pādā osiditum ārabhimsu. So pana Buddhārammaṇam piṭṭim dajham katvā udakapiṭṭen'eva gantvā Jetavanaṃ pavisitvā Satthāraṃ vand tvā ekamantam nisīdi.

(d) Aparam pana ekadivasam Bodhisatto tath'eva uyyānam gacchanto devatāhi nimmitam kālakatam diṣvā purimanayen'eva pucchitvā samviggahadayo puna nivatt tvā pāsā lam abhirūhi. Rā'āpi pucchitvā heṭṭāvuttanayen'eva samvidahitvā puna vadḍhetvā samantato yojanappamāṇe padese ārakkham ṭhapesi.

## B.

(a) Yam te tam nappasāhanti senam loko sadēvako |  
tam te paṇḍiāya bhūti'āmi ānam pattam va aṇṇanā ||  
Vasim karitvā sampappam satthi ca suppatitṭhitarā |  
ratṭhā ratṭham vicarissam āvake vinayam puthu ||

(b) Anumatto pi puṇḍiṇa attho mayham na vijjati |  
yesā ca attho puṇḍiṇam te Māro vattum arahati ||  
Atthi saddhā tato viriyam paṇḍiā ca mama vijjati |  
evam mam pahitattam pi kim jivam anupucchasi ||

(c) "Andhakamakassā na vijjare. kacche rūlhatige caranti gāvo |  
vutṭhim pi sabeyyum āgataṃ atha ce patthayasi pavassa deva" ||  
Baddhā hi bhisi' sūsamkhatā, tinnā pāragato vineyya oggam |  
attho bhisiya na vijjati, atha ce patthayasi pavassa deva" ||

(d) Lābhā vata no anappakā ye mayam Bhagavantam addasāma |  
saranam tam upema cakkhuma, satthā no hobi tuvaṃ mahāmuni ||  
Gopīca abhā ca assavā, brahmacariyam Sugate carāma |  
jātimaraṇassa pāregā dukkha'ss' antakarā bhavāma ||

4. (i) Write notes on *any four* of the following :—

8

Jetavana, tinnam ratanānam, sakadāgāmi-phala, Mahāpaddana, M āra, and Bāvera.

(ii) Illustrate the use of any four of the following terms or expressions in Pali and show how they have been represented in the Vernacular: *ṭhapetvā, paṭṭhāya, ārabha, cattāro dasakā cattālisā, cha chakkāni, bhāriyaṃ nacchāda, and haṃ ti vā huiṃ ti vā.*

8

(PRAKRIT.)

SEVENTH PAPER

Examiners— { Mr MURALIDHAR BANERJEE, M.A.  
PANDIT VIDUSEKHAR SASTRI

[Full Marks—50.]

Answer THREE questions only, of which Questions 1 and 3 are compulsory.

1. (a) हण्ड कुम्भिआ कधेहि कहिं तए एशे महालदनभाशुले 20  
उक्किण्णगामक्खले लाअकोए अङ्गुलीअए शमाशादिदे ॥ पशोदन्तु  
भावमिइशा । ण हगे ईदिशइश अकयइश कालके ॥ शे हगे यालवडि-  
शप्पहुदीहिं मश्वन्नध गोत्राएहिं कुडुम्बभलगं कलेमि ॥

(b) चियष्ट वशन्तशेगिए, चियष्ट ।

बोलन्ति अ पेच्छन्ता पडिमा-

संकन्तधवलघगसंघाए ।

फुडफडिहमिलामंकुलखलिओ-

वरिपत्थिए विअ णइप्पवेह ॥

उत्थङ्किअहुमगिवहा गिरि-

घाउम्बत्तमुच्छिअमहामच्छा ।

वेलासेलक्खलिआ उद्धं

भिज्जन्ति उअहि-जलकल्लोला ॥

(c) तओ दीहं नीससिऊग जम्पिअं पज्जोएण

मयगवस्मास्स नरवर वाहिघित्तस्स तह अ मतस्स ।

कुवियस्स मरन्तस्स अ लज्जा दूरजिसया होइ ॥

(d) यक्खिमादाय गीवाथ नाराचवल्लेन सो ।

वामहत्थेन केसेसु गहेत्वा दक्खिणेन तु ॥

उक्खिपित्वा असिं आह भच्चे मे देहि दासि, तं ।

मारमीति मयुक्ता सा जीवितं याचि यक्खिनो ॥

(i) Translate (a) and (b) into Sanskrit.

(ii) Explain (c) and (d) giving Sanskrit equivalents.

(iii) Name the languages or the dialects, as the case may be, of the passages quoted above.

(iv) Explain the long *ā* in *kumhilaā* in (a) and support or amend the reading *-akkhale* in *ukkenṇa-nāmakkhale* in that passage. What reading would you suggest here according to your Prakrit Grammar, *Prākṛtaprakāśa*?

(v) Explain the form *cyiṣṭṭha* in (b) and *dārujjiyā* in (c), writing a short note.

(vi) Write briefly the difference between (a) Sanskrit and Prakrit, and (b) Māhārāṣṭrī and Sauraseni.

2. आहगिज्ज सरोसं तं हत्थिं विंझमेलसिहराभं ।

10

मोआविओ मए सो दन्तन्तरण्णिओ परिब्बाजओ ॥

परं जोणहा उणहा गरळण्णिओ चन्दणरओ

खअक्खारो हारो रअगि-पवणा देहतवणा ।

मुगाली बाणाली जलइ अ जलहा तणुलआ

वरिद्धा जं दिद्धा कमलवअगा सा सुगअगा ॥

Translate the above passage into English.

3. (a) पारिपाश्वकः—( स्मृत्वा । कधिदं ज्जेव्व छइल्लेहिं ।

20

सो सट्ठओ त्ति भगई दूरं जो णाडिआई अणुहरई ।

किं ण एत्थ पवेअविक्कम्भाई ण केवलं होन्ति ॥

(b) राजा—( विदूषकमपवाच्यं । ) एदाए

जं मुक्का सवणन्तरेण तरला तिक्खा कडक्खच्छडा

शिङ्गुगा धिद्धिअ केअअगिअदल्लो गो-परिच्छइई ।

तं कप्पूररसेण णं धवल्लिदो ज्योक्काअ णं ह्माविदो

मुत्तागं घगरेणुग व्व छुरिदो जादोक्कि एत्थन्तरे ॥

(c) विदूषकः—गवभघरवासेग सेअअल्लिपित्तगत्ता संभूदा

तत्थभोदी कप्पूरमअरी । ता इमं सिचअल्लेण वीज-

इस्सं दाव ! । तथा कुर्वन् । हा हा कधं वरिद्धपवणेज

पवणेग गिळवणो पदीवो । विचिन्थ स्वगतम् ।

भोदु । लीलोज्जागं ज्जेव्व गच्छह । ( प्रकाशम् । )

भो, अन्धआरगच्चितं वट्टदि । ता गिक्कामह्य सुरङ्गा-

मुहेन ज्जेव्व पमदुच्छाणं दाव ।

(i) Turn extract (a) into English. What is a सट्ठ Wherein does it differ from a णाडिआ ?

(ii) Turn extract (b) into Sanskrit. Shew how the meaning of the stanza is improved if शिङ्गुगा is read as शिङ्गा ।

(iii) Explain fully in English extract (c) indicating the context. What dramatic purpose is served by विदूषक putting out the light?

4. Give the Prakrit forms of *any four* of the following, referring to rules of grammar :— 10

आत्मा ; अश्वः ; इक्षुः ; कृष्णः ; कृत्वा ; स्नानं ; पृथिवी ।

5. Form *four* sentences joining the inflected forms of *any* of the following bases and roots :— 10

कुग ; पठ ; डुव्व , गेगह . तुम्ह ; पाउअ ; पण्ह ; वसह ; वाह ; मंसु ।

(PERSIAN.)

### SEVENTH PAPER

Examiners—{ AGA MD. KAZIM SHIRAZI.  
SHAMS-UL-ULAMA HIDAYET HOSSAIN, KHAN  
BAHADUR.

*The figures in the margin indicate full marks.*

1. (a) Translate into English *any six* of the following :— 12

درویش به پادشاه چه گفت - سلطان محمود غلامی  
داشت ایاز ذم . نوکر دز کلاغ دز یکجا دید - بر پل شخصی  
سیاه دیدم - در کوچه برد ، بمیان آمد - شخصی شیطان را  
در خراب دید - برهنه شده دز حوض آب رفتند - علی  
نزد پدر عرض کرد - در ایران درد خفته زیاد است - در  
حضور پدر بی ادب نمی نشست - مردی احمق خر خود  
را گم کرد \*

(b) Select *any five* words from sentences given above that are commonly used in your vernacular, noticing change, if any, in form and meaning. 5

2. (a) What do you mean by *izāfat*? When is it used? 4

(b) What are the chief divisions of اسم ? Name them with English equivalents. 5

3. How is Imperative formed in Persian? Give the Imperative 2nd person singular of دریدن - نوشتن - خوابیدن - رفتن . 6

4. Give in Persian, both in words and figures : 7, 18, 26, 36, and 106. 5

5. Translate into Persian *any six* of the following :— 12

It is a black horse. The house is small. Come to-morrow. This flower is yellow. He is a blind boy. We will go. It is a big garden. He is sick. I will give the book. Go away from here. He has come. She is a good girl.

## INDIAN VERNACULARS—BENGALI

## EIGHTH PAPER

*Examiner*—PROF. S. K. CHATTERJI, M.A., D.LIT.

*The questions are of equal value. Select six questions only.*

1. What New Indo-Aryan speeches are the immediate sisters and cousins of Bengali? What special features does Bengali possess in common with these? Indicate by means of a diagram the relationship of Bengali with Oriya, Maithili, Hindustani, Panjabi, Gu'arati, Marathi, and Sinhalese.

2. Discuss the problem of the Non-Aryan element in Bengali—in vocabulary, in characteristics relating to morphology and idiom, and in tendencies.

3. Write a short account of the accent system of Bengali in its historical bearings.

*Or,*

Discuss the phenomenon of Umlaut in Bengali.

4. Discuss the character of the language of the *Caryāpadas*.

5. Classify the dialects of Bengali, mentioning the special features of each dialect-group.

6. Estimate the extent and character of the Persian element in Bengali, giving at the same time a brief historical survey of the question of Persian influence on the language throughout the centuries after the conquest of Bengal by the Turks.

7. Give in a tabular form the consonant sounds of Bengali as in the Standard Colloquial Dialect as spoken in Calcutta, and discuss the nature of the Bengali fricative sounds and semivowels.

*Or,*

Give the history of the final vowels of Old Indo-Aryan (Sanskrit) through Middle Indo-Aryan (Prakrit and Apabhramsa) in Bengali.

8. Explain, with examples, the working of four of the following phonetic processes in Bengali: *Compensatory Lengthening; Anantysis; Spontaneous Nasalisation; Assimilation of Consonants; Deaspiration; Spirantisation; Vowel Harmony.*

*Or,*

Discuss the treatment in Bengali of the following sounds of Persian in Persian loan-words in the language:—

ع , س , ز , ذ , خ

9. Discuss the origin of the plural and the genitive and locative affixes in the declension of the Bengali Noun.

10. Trace the history of the forms for the Bengali personal pronouns for the first and second persons.

11. Write a historical account of the passive voice in Bengali.

12. Explain the formation of the base for the simple past tense of the Bengali Verb, as well as the origin of the compound tenses.

## INDIAN VERNACULARS—HINDI

## EIGHTH PAPER

Examiners—{ PROF. S. K. CHATTERJI, M.A., D.LIT.  
MR. BASANTAKUMAR CHATTERJEE, M.A.

## HINDI PHILOLOGY

*The questions are of equal value.*

*Select only six questions.*

1. Discuss the successive stages in the evolution of Hindi from Old Indo-Aryan (Vedic), with illustrative examples of words and forms.

2. 'Hindi and Urdū are only communal names of the same language with almost the sole difference of script.' Criticise this remark with suitable illustrations. What is the proper meaning of the term 'Hindustānī'? Comment on the spelling (हिन्दुस्तानी).

*Or,*

Write a brief history of the origin and use in literature of the खड़ी-बोली.

3. Write a brief note on the extent of the foreign influence in Hindi, giving illustrative words.

4. Discuss the accent-system of Hindi, with special reference to the influence of accent on vowels.

5. Give a short account of the vowel system of Hindi, and trace the sources of two of the following vowels of Hindi : अ, ए, ओ.

6. Write brief historical notes on the pronunciation of six of the following consonants in Hindi : क, ख, ग, घ, ङ, फ, ब, द. Discuss also the nature of the sound represented by the dot under the अ and इ in अँ and इँ.

7. Write an historical note on the agreement in gender between nouns and the adjectives and participles qualifying them in Hindi. Can you generalise any rules about the gender of borrowed foreign words in Hindi? How do Sanskrit words behave in this matter?

8. Give the source of the inflexions and postpositions in the declension of the noun in the खड़बोल.

9. Explain the formation of the pronominal adverbs and adjectives used in the खड़बोल.

10. Give a classification, historically considered, of the tense forms of the Hindi verb, and indicate the origin of the following tenses : कर्, कर्ना, करौ. (Braj.), करता, जिश.

*Or,*

Write an historical note on the three Prayogas—kātari, karmāṣī, and bhāṣe—of the Hindi verb in the past tense.



## INDIAN VERNACULARS—URDU (PRINCIPAL)

## EIGHTH PAPER

*Examiner—PROF. S. K. CHATTERJI, M.A., D.LIT.*

*The questions are of equal value.*

*Answer SIX questions only.*

1. Indicate the place of Urdu in the family of Indo-Aryan languages. Explain also its relationship with Sanskrit, Persian, Greek, French, English and Russian. Draw genealogical tables in illustration of your answer.

2. What are the various views as to the origin of Urdu? Which of the following dialects forms the basis of Urdu—(i) Bra'hākhā (ii) Kharī-bolī of Western United Provinces, (iii) Panjabi of Lahore? Explain clearly your reasons in affiliating Urdu to any of the above.

3. What are the extant remains of Urdu literature prior to 1650 A.D.? Indicate their character and importance for the study of the philology of Urdu.

4. Discuss the accent system of Urdu, and write a short note on vowel quantity in Urdu verse.

5. What are the sources of the Urdu oblique forms in the declension of the noun—

-ē, -ā as in *ghōrā*—oblique *ghōrē, ghōrō*? Give the derivation of the postpositions *kā, -sē, -nē, -mē*

6. Discuss two of the following:—

- (i) Spontaneous Nasalisation.
- (ii) Euphonic Insertion.
- (iii) Cerebralisation.
- (iv) Compound Verbs.

7. Give the history of the Urdu pronominal forms for the first and second persons from Old Indo-Aryan (Sanskrit) downwards.

8. Discuss the origin of the present aorist, future and present progressive tenses of Urdu (e.g. *calū, calūgā, cattā*). Explain the construction of the following sentence and the formation of the verb in it **کل میں نے**

**دہائی لہائی**

9. (a) Write in the Perso-Arabic (Urdu) character as well as in properly transliterated Roman Urdu the following words कल भैस, चहा, रसमा, राजा, कट, खुद, गुराब, जूर, बहम, मजहब, खास.

(b) What are the original sounds of **ث**, **س**, **ص**, and of **ڑ** **ض** **ز** **ظ** and **ذ**?

10. Explain eight of the following forms:—

حجن, کوتوال, بندگان, مسلمان, میواجات, خدا, الله,  
خانم, بہادر, آستانی, ہندو, فرنگی, صدی, بادشاہ, دیو,  
بت,

11. Write etymological and semantic notes on *eight* of the following Arabic words :—

حقہ , موت , عملہ , منتظر , تمدن , رجوات , قیصر , صاحب ,  
غلام , مرحوم , ولایت , نواب , النجل , صوفی , مکتب , سکہ ,  
شنبہ ,

Or,

Compare and contrast the grammatical system (sounds, affix system, and syntax) of Urdu with that of Arabic.

12. Trace back to their Old Indo-Aryan (Sanskrit) equivalents, through the Middle Indo-Aryan (Prakrit), *two* of the following Urdu sentences :—

- (a) اس نے یہ بات سنی -  
(b) میں جا نہیں سکتا -  
(c) دلہا بیاہ کرنے کو آیا -  
(d) 'مان' مجھے بہرکہ اور پیاس لگی ہے -

## COMPARATIVE PHILOLOGY

### FIRST PAPER

*Examiner*—MR. SUKUMAR SEN, M.A.

*The figures in the margin indicate full marks.*

1. Give a brief survey of grammatical study in Ancient India. 15
  2. Write short notes on the following names and titles :— 15  
Leskien, Hirt, Bartholomæ, Kāśikā, Pischel, Nighaṇṭu, Bhandarkar, Beames, Pott, Ascoli.
  3. What are the main characteristics of the Semitic languages? 20  
What are the chief languages of this family? How are they connected with each other? Is the Semitic family of languages genealogically connected with the Hamitic and the Indo European families?
  4. Write a short essay on word formation. 15
- Or,
- Discuss the main factors of linguistic change. 15
  5. Discuss the origin of doubts. Give suitable examples from 15  
Sanskrit, Bengali and English.
  6. Write full semantic notes on the following words: thing, 20  
villain, quaint, maudlin, idiot, candidate, नौसार्ह, पावक, झुठको

Or,

What are the main directions of meaning change? Account 20  
for the fact that semantic change is much slower than phonological  
change in a language.

## SECOND PAPER

*Examiner*—PROF. I. J. S. TARAPOREWALLA, B.A., PH.D.

*The figures in the margin indicate full marks.*

*Answer the FIRST question and ANY FIVE of the remainder.*

1. What are the main considerations to bear in mind in dealing with Linguistic Palaeontology? How far does this branch of Linguistics depend on other sciences? 20
2. What do you know about either *Kharoṣṭhī* or *Cuneiform*? Give details. 16
3. Discuss fully the vowel sounds in Sanskrit, giving a detailed classification. How far do the conclusions of Sanskrit grammarians in this respect agree with those of modern phonetics? 16
4. Discuss the merits of Devanagari as a *phonetic* script. 16
5. What do you mean by *sonants*, *retroflex*, *bi-labial*, and *liquids*? 16
6. What parts of the vocal apparatus are utilised in pronouncing the following :— 16

अ. इ. उ. and व ?

If possible, illustrate by means of diagrams.

7. 'Assimilation seems to be at the root of most Sandhi rules.' Can you justify this statement? Illustrate by suitable examples from Sanskrit, Bengali, and English. 16
8. Give four instances each of *metathesis*, *haplology*, *dissimilation*, and *umlaut*. 16

Explain clearly what is meant by each of these terms.

## THIRD PAPER

*Examiner*—MR. KSHITISCHANDRA CHATTERJEE, M.A.

*The questions are of equal value*

*Answer ANY SIX questions.*

1. Write a short essay on the classification of the Parts of Speech in Sanskrit and in some other Indo-European languages, ancient and modern, that you know.
2. 'The distinction between the active and passive verb in most Indo-European languages is illusory.' Discuss.
3. Discuss fully the phenomenon of Syncretism, with special reference to Sanskrit, Greek, Latin, Pali, and the Prakrits.
4. Write a note on the pronominal declension in Sanskrit with comparisons from other ancient Indo-European languages.
5. Write short notes on : (1) the Vedic Infinitive, (2) Governing Compounds, and (3) the Category of *Aspect*.
6. Discuss the origin of the *बभूवु*'s and account for the strong, middle, and weak nominal endings.
7. Comment on the following :—

(1) शक्यमालिङ्गितुं पवनः ।

(2) मशकाय घृमः ।

(3) दुर्गन्धिः पवनो वाति ।

(4) तेनास्य लोकः पितृमान् विनेता ।

(5) युधिष्ठिरः श्रेष्ठतमः कुरुणाम् ।

8. Write a note on the समासज्ञ' in Sanskrit.

## FOURTH PAPER

The questions are of equal value.

## FIRST HALF

Examiner—PANDIT VIDHUSEKHAR SASTRI

Answer THREE questions only.

1. Explain how the Middle Indo Aryan stage evolved out of the Old Indo-Aryan. What are our oldest indications about the formation of Middle Indo-Aryan? Mention also the earliest specimens of Middle Indo-Aryan that we possess.

2. Write notes on two of the following: (a) Cerebralisation in Middle Indo-Aryan; (b) Interval Stops and Aspirates in Middle Indo-Aryan; (c) Spontaneous Nasalisation.

3. Indicate clearly the position of the *Gāthā* dialect in the history of Indo-Aryan.

Or,

What do you understand by *Apabhraṃśa*?

'Each Modern Indo-Aryan Vernacular is based on a local *Apabhraṃśa*.'

Discuss this statement.

4. Write a note on the *deśi* and foreign words in Middle Indo-Aryan. Are there *deśi* words in Sanskrit? If so, how did they come into the language? Give instances.

5. Discuss the use of the Prakrits in the Sanskrit drama. How far are these to be taken as local dialects current in the various parts of the country?

6. Identify the dialects of three of the following passages, and write a short note on each dialect:—

(a) *Sutanukā nāmo devadāvikyī: tam kāmavitha balana-ṭeṇ: Devadinnē nāma lūpadakhe.*

(b) *iṣṭhāṇaṃ śadaṃ māemi: sūle hage...hage va'apulisa-maṇṣiḥ kāmāḍavve.*

(c) *Sadhu matapituṃ śūruṣa, mitra-saṃstuta-ātikanam ca brahman-śramananam sadhu danaṃ, pranana anarobh: sadhu.*

(d) *jiviu kāsū na vallaha: dhanu puṇu kāsū na iṭṭhu |  
doṇṇi vi avasari nivaḍḍaṭṭi vi a-s-iva gavaṭ viṭṭhu ||*

## SECOND HALF

Examiner—PROF. SUNITI KUMAR CHATTERJI, M. A., D. LIT.

1. (a) *idō vi poḍhame pa ṭṭhe sasi-saṅkhamuṇṇa-sacchāhāo viṇhidacū-ṇamuṭṭhapaṇḍu ā: vivināraṇapapaḍi addhukāṇeap-sovāp-sahidā: pāsā-tapantio olaṇ bidamuttāḍāma: hup phattha- ādāyaṇamuḥa anḍehiṇi vi jāyanti via U' aiṇiṇi sottiṇ via subovaviṭṭhe piddāda: dovaṇio, sadahupā kalamodapēṇa palohiṇā pa bhakkhaṭṭi vāsā baliṇi suthāsa: aṇṇ-dāe.*

(b) *goli ṇaṭe kacche cakkhanta: rāṭā: pattāiṇi |  
upphadaṭṭi makkaḍḍo khokkei a poṭṭam ca piṭṭei ||*

(c) *akaramhase te kiccaṃ yaṃ balam ahurimbasā: |  
māgarāṇa namo ty-atthu api k'aci labhāmase ||  
akataññam akattāṇam katassa' phatikārakam |  
yasmīṇ katanñiṇā n'atthi nīruthā tassa sevāṇā ||*

yassa sammukhacippena mittadhammo na labbhati |  
anusuyyap anukkosam anukam tamhā apakkaṃve ||

(i) Render the above passages : to English.

(ii) Name the dialects in which (a) and (b) are composed and mention their special characteristics.

(iii) Derive *cakkhanto* in (b) tracing its Sanskrit origin, if any, and explain *poṭṭam* and *piṭṭe* in the same passage.

(iv) Explain *ty-atthu* (giving another example of the *sandhi*), *akaramhase*, *ahuramhase*, and *labhāmase* in (c).

Or,

(i) Translate the following passages into English :—

(a) nissāsa hāralaṭṭhi sarasaparisatā candanucandakārī,  
candō debhassa dāho, sumasā saraṇā bāsasohā muhammi |  
māṇam nandibhāto diṭṭhasaikalākamalo kiñcā tīe  
niccāp bāhappavāhā tuha subhā ke honti kullāhi tullā ||

(b) goḷādaṭṭhiṃ pecchiṃ uḇahavai-vaṃ hālasouhā |  
āḍhattā uttarimṃ dukkhutārāe pavāḇe ||

(c) peccāsa sarasasohari-vaṇḍaḍḍāhi-ḥāvisamaacchinnam |  
dū adhaṇu amghaḇci-vaṇḍaḍḍāhi-ḍāsamaliā-vaṇḍam ||  
nisajakaagghāṇi nīlāda ḍaṇṭṭhāhi iḍḍibhūma-ābāḍḍam |  
galāruhira idhalahuṇi anḍhi-ummillatāsam rāmasi-vaṇḍam ||

(d) s. sāthū ti tam passena nipaṭṭevā ko jānāti kim p'esa  
kari-satīti cintevā ya hā mukham pidahimṃ na sakkoti tatha  
tassa adharoṭṭhe ca uttaroṭṭhe ca daṇḍakam ṭhapetvā mukham  
pavisitvā aṭṭhikotam tuṇḍa na pabari aṭṭhi pativā gataṃ. so  
aṭṭhṃ pātetvā sīha-sa mukhato nikkhamanto daṇḍakam tuṇḍena  
pīḇitvā pā ento nikkamitvā sākhagge nīlīyī.

(ii) Give the alternative form, if any, of *soṇhā* in (b).

(iii) Write the meaning of, and derive *āḍhattā* in (b) and write its form in passive, present, third person, singular.

(iv) Write the alternative forms of *panvī* in (b).

2. (i) Discuss philologically the formation of any six of the following words, giving their Sanskrit equivalents : *gheppati*, *dakkhati*, *acchati*, *kālave*, *daṃsedum*, *laṭṭhi*, *ciṇṇa*, *guttha*, *bāha*, *āḷiddha*, *pellia*, and *garu*.

(ii) Compose three sentences in Pali using verbs from any three of the following roots as directed : √ghas (de-ide-rative), √chid (aorist), √kram (intensive), √dā (causative) √vas (past participle), √hr (aorist), √grah (infinitive).

(iii) Compose three sentences in Prakrit using any three of the following roots : √masj, √lih, √vraj, √jalp, √mrḍ and √śak.

3. Translate the following into English :—

(a) Vijayapamukhā sabbe tam uppecca uppeccimṃ |  
ayam bho ko nu dīpo'ti, laṅkāḍipo ti abruvī ||  
na santi mannā ettha, na ca hesati vo bhayaṃ |  
itvatiṭṭha kiṇḍikāyaṃ te juleṇa ni-ñciya ||  
sutam ca tesam hatthesu laggetvā nibbhaṣagamaḥ |  
dasseṣi sonirūpeṇa pariārakayakkhiṇi ||  
eko tam vāriyato pi rāṇputtēna anvaṇḍa |  
gāmanhi vijāṇaṇamhi bhavanti sunakhā iti ||  
tassā ca sāmānī tattha Kuveṇī nāma yakkhiṇi |  
niṣiḍḍi rukkhāni ḍāmbhi katanti āpasī viya ||

(b) tae paṃ Siḍḍhatthe khattie pariccā-kālasam ayaṃsi koḍumbiyapurise  
saddavei.—tā evaṃ vajāsī. khippam eva bho devānuppiyā a), a savisesam

bāhīriyam uvathānasālam gandho-daya-ittam suiyasammatijivalittam sugandha-  
varapañcavanam pphovayā akaliyam kālagurupavarakundurukkaturukka dajji-  
hanta dhūv maghamaghiantagandhuddhūyāhirāmam sugandhavaragadhiyam  
gandhavatthibhūyam kareha kāraveha karittā ya kāravettā ya sīhāsanam  
rayaveha.

## FIFTH PAPER

Examiner—MR. BASANTAKUMAR CHATTERJEE, M.A.

HISTORICAL AND COMPARATIVE GRAMMAR OF MODERN INDIO-ARYAN  
(BENGALI)

The questions are of equal value.

Answer ANY SIX questions

1. Give a tabular representation of the origin of Bengali from Old Indo-Aryan, and explain the relation of all the Magadhan and Ardha-Magadhan Vernaculars of modern times.

2. Write notes on any four of the following :—

(1) *Satem* languages, (2) A Koinē dialect, (3) Tibeto-Borman influence on Bengali, (4) Dialects in the Inscriptions of Asoka, (5) Existence of pre Aryan culture in ancient Bengal, (6) Vijayāditya and the Aryan colonisation of Ceylon, (7) *Avahattha*, (8) Sarvānanda's *Tikā-sarvasva*, (9) *Crepas Xastres Orthobled*

3. Explain and illustrate any four of the following :—

*Spirantisation, Diphthongisation, Dissimilation, Compensatory lengthening, Euphonic glides, Spontaneous Nasalisation, Anaptyxis, Vowel Harmony, Metathesis, Deaspiration, Prothesis, Labialisation.*

4. Attempt a short history of the accent-system in Bengali, and give examples of the loss of syllables due to absence of the accent.

5. State and illustrate Fortunatov's Law, and explain with suitable illustrations that Eastern (Magadhan) cerebralisation is a continuation of Fortunatov's Law.

6. Give a short account of the influence of Portuguese on Bengali. Name six Bengali words of Portuguese origin, and discuss the phonology of each of them.

7. Trace back the source-form of one of the following New Bengali sentences from Indo-European, giving the probable phonetic forms of the same in (1) Old Bengali, (2) Middle Indo-Aryan (Prakrit), (3) Old Indo-Aryan (Vedic), and (4) Indo-European :

গোরালা গাই ঘোর ।

সে ঘোড়-এল ।

8. Explain the following statement with a few apt examples :—

'Bengali may be said to have started *de novo* in its declension of the noun, having but very little of the declinational system of Old Indo-Aryan; and the little that it has preserved consists of a few inflections which have been generalised.'

9. Derive any eight of the following words and forms :—

সাঁকো, সাঁতো, পারভ-পকে, উঠতি বরেন, পোরাডী, এয়ো, পাঁকাটি, বাড়ী, মেনো, দেহুখো, মোক, আকটা, দুকড়ী, সাঁহাগিনী, গিরীপনা, পরমত, বাঁদুলি, আলসে (narapat on a terrace), গড়ল, জল-সই, বোমর, কানাসোনা, বেটেগ, বাবাত, ন-বক, বে-বেড, বিখাউজি, বাঁদালিকা, কহতবা, বাজীকর, বাগিচা, শিকানা, সমঝার, and সাবালক ।

## SIXTH PAPER

Examiner—MR. P. C. GHOSH, M.A.

The questions are of equal value

Write essays on two of the following subjects :—

- (a) The origin of writing.
- (b) Foreign element- in Bengali vocabulary.
- (c) Application of the Roman Alphabet to the languages of India.
- (d) The province and methods of Semantics. (Illustrate your answer from English and Bengali.)
- (e) 'The sentence not the word, is the unit of language.'

## ALTERNATIVE (A) : ARYAN AND INDO-EUROPEAN PHILOLOGY

## SEVENTH PAPER

## FIRST HALF

(INDO-IRANIAN PHILOLOGY : GRAMMAR AND PHILOLOGY)

Examiner—PANDIT VIDHUSEKHAR SASTRI

The questions are of equal value.

Attempt only THREE questions

1. Translate the following passage as literally as possible into Sanskrit :—

at hvō vanhəus vahyō nā aibi-jamyāt,  
yō nā ərəzūs aavaneō paθō sisōit,  
ahyā anheus astvatō mananhas-cā,  
haiθyann ā-stis yō g ā saēti Ahurō :  
arədrō θwāvā- huxəntuse spənto Mazdā.

2. (i) In the passage quoted above account for the case in *vanhəus*.

(ii) Derive *vahyō*, giving its Sanskrit equivalent, and write another word with the same suffix.

(iii) What are the cases in *nā* and *paθo* and how will you account for them?

(iv) Derive *aibi-jamyāt* and *sisōit*, and conjugate their roots in the present tense and subjunctive mood, 3rd person singular.

(v) What are the forms of *ahyā* and *saēti* in YAv?

(vi) Write the alternative forms, if any, of *yəng* and *huxəntuse*.

3. (i) Is hiatus allowed in Avesta? Is it also found in the Vedic texts? If so, give a few examples from both of them.

(ii) Derive *dyapta* (as in *ahmāi jasat dyoptəm*), and explain *y* in the word showing its occurrence, if any, in Sanskrit and Prakrit.

(iii) Write the meanings of the following; *gava*, *zasta*, *√tas*, and *√kar*, and show the difference, if any, with regard to their use. Write also the Sanskrit equivalents of the last three words. What is the Persian word for *zasta*?

- (iv) Write a philological note on *gāvəərə*.

4. (i) What do you understand by Epenthesis, Prothesis and Anaptyxis? Give some example from Avestan.

(ii) Do they occur in Sanskrit, Prakrit or Indo-Aryan vernaculars? If so, write some such words.

(iii) Write the rule of Prothesis.

5. (i) Explain the following words philologically through the light of Avesta; *nirjhara mahyam* (personal pronoun, dative, singular), *prathama, edhi* (✓as, imperative, 3rd person, -ingular), *jahi* (✓han, imperative, 3rd person, singular), and *ettha* (Prakrit).

(ii) Write a note on the development of *s* in Avesta

(iii) Conjugate ✓kar in preterite, imperative, optative, and subjunctive, 3rd person, singular, and write its infinitive, and present and past participles.

## SECOND HALF

(INDO-IRANIAN PHILOLOGY: ELEMENTS OF AVESTA AND OLD PERSIAN)

Examiner—PROF. I. J. S. TARAPOREWALLA, B.A., PH.D

*The figures in the margin indicate full marks.*

*Answer Question 1 and ANY TWO of the rest.*

1. Translate, giving explanatory notes where necessary;—

20

(a) Ha mō tā+cit yā haininō anhaire darəyem aytvō  
hajōim rāðəm-ca buxaiti mosu jaidyamnō huxratas.

(b) abda-ca iða Yima anuhe astvaite -ada āt  
yat iða p səus anun-ay-he paðəm vaənāite.

(c) yō anavanhabdēmnō zəənanta niehaurvaiti Mazda dāmān  
yō vīspəm ahūm astvantəm ərəðwa snaiðica nipāiti pīsa hū fiā-mō dāitīm.  
Render one of the above passages into Sanskrit, giving cognate  
equivalents as far as practicable.

2. Translate, and explain with reference to the context, *any five* of the following;—

15

(a) pairi-sē usi vərənuīði.

(b) yōi asāi vaonərə.

(c) nōit astō nōit u-tānahē cinmānī.

(d) yō raosta xsəθrō-kāmya.

(e) yenhe frafravaiti manō,

(f) Ahurāi Ma/ðāi vīspā vohu cinahmi.

3. Explain *any five* of the following phrases, showing the connection in which they occur in the text;—

15

(a) Pāyū əwōrəstāra; (b) višō sūraya Əraetaonō; (c) haca  
Gayāt-Mareθnat ā Sənsvantāt; (d) naire-mana Kərəsəpō; (e) katayō  
naskō-frasanhō; (f) yāvərənā Frasaostra-Jāmāspā.

4. Write full grammatical notes on *tas cit*, *anhaire* and *aytvo* in Question 1 (a), *vaənāite* in Question 1 (b), and on *snavanhabdēmnō* in Question 1 (c).

5. Point out the peculiarities of, and the differences between, the Gathic and the later Avestan dialect.

15

6. 'The Haoma ceremony is only the Soma worship very much reformed and refined.' Criticize this statement, and show in what different senses the word Haoma is used in the Avesta.

15



## EIGHTH PAPER

(INDO-EUROPEAN PHILOLOGY, WITH ELEMENTS OF GREEK)

*Examiner*—PROF. S. K. CHATTERJI, M.A., D.LIT.

PART I: INDO-EUROPEAN PHILOLOGY: 50 marks.

*(Answer THREE questions only in this part. The questions are of equal value in this half.)*

1. Discuss the treatment of the Indo European velars (both simple and labialised) as well as 'palatals' in Aryan and Old Indo-Aryan and in Greek.
2. Write a note on Indo-European Ablaut.
3. Discuss the gender-system of Indo-European.
4. Decline two of the following Indo-European nouns :—

*ἄγχιος, πόρ, \*ajūs, \*bheronts, \*periktios.*

5. Write a note *either* on the thematic conjugations of Indo-European, *or* on the aorist in Indo-European.

PART II: ELEMENTS OF GREEK (HOMERIC GREEK :  
ILIAD, BOOK I) : 50 marks.

*(Answer Question 1 which is compulsory and ANY TWO others from among the rest )*

1. Render into English *any three* of the following passages, with 30 grammatical and other notes on the words underlined :—

- (a) τὸν δ' ἀπαμειβόμενος προσέφη πόδας ὠκὺς Ἀχιλλεύς :  
 " Θαρσύνσας μάλα, εἰπὲ θεοπρόπιον ὅτι οἶσθα.  
 οὐ μὰ γὰρ Ἀπόλλωνα διίφιλον, ᾧ τε σύ, Κάλχαν,  
 εὐχόμενος Δαναοῖσι θεοπροπίας ἀναφαίνεις,

οὐ τις ἐμευ ζωντος καὶ ἐπὶ χθονὶ δερκομένοιο  
σοὶ κούλης παρὰ νηυσὶ βαρείας χεῖρας ἐπόλσει  
συμπάντων Δαναῶν, οὐδ' ἦν Ἀγαμέμνονα εἴπης,  
ὃς νῦν πολλὸν ἀριστος Ἀχαιῶν εὐχεται εἶναι."

(b) "ἦλθον ἐγὼ παύσουσα τὸ σὸν μένος, αἶ κε πίθῃαι,  
οὐρανόθεν : πρὸ δέ μ' ἦκε θεὰ λευκώλενος Ἥρη,  
ἄμφω ὁμῶς θυμῷ φιλέουσα τε κηδομένη τε.  
ἀλλ' ἄγε, λήγ' ἐρίδος, μη δὲ ξίφος ἔλκεο χειρι :  
ἀλλ' ἦ τοι ἔπessin μὲν ὀνειδίδουσιν, ὡς ἔσεται περ.  
ὦδε γὰρ ἐξερέω, τὸ δὲ καὶ τετελεσμένον ἔσται :  
καὶ ποτέ τοι τρεῖς τόσσα παρέσσεται ἀγλαὰ δῶρα  
ὑβριος εἵνεκα τῆς δε : σὺ δ' ἴσχεο πείθεο δ' ἡμῖν."

(c) ὡς εἰπων προῖει, κρατερὸν δ' ἐπὶ μῦθον ἔτελλεν.  
τῷ δ' ἄεκοντε βάτην παρὰ θῖν' ἅλος ἀτρυνγετοιο,  
Μυρμιδόνων δ' ἐπὶ τε κλισίας, καὶ νῆας ικέσθην.  
τὸν δ' ἔυρον παρὰ τε κλισίῃ καὶ νῇ μελαίνῃ  
ἦμενον : οὐδ' ἄρα τῷ γε ἰδὼν γήθησεν Ἀχιλλεύς.  
τῷ μὲν ταρβήσαντε καὶ αἰδομένῳ βασιλῆα  
στήτην, οὐδέ τί μιν προσεφώνεον οὐδ' ἐρέοντο :  
αὐτὰρ ὁ ἔγνω ἦσιν ἐνὶ φρεσὶ φώνησέν τε.

(d) αὐτὰρ ἐπεὶ παύσαντο πόνου τετύκοντο τε δαῖτα,  
δαίνυντ' οὐδέ τι θυμὸς ἐδεύετο δαιτος εἰσης.  
αὐτὰρ ἐπεὶ πόσιος καὶ ἐδητύος ἐξ ἔρον ἔντο,  
κούροι μὲν κρητῆρας ἐπεστέψαντο ποτοῖο,  
νώμησαν δ' ἄρα πᾶσιν ἐπαρξάμενοι δεπάεσσιν :  
οἱ δὲ πανημέριοι μολπῇ θεὸν ἱλάσκοντο  
καλὸν αἰείδοντες παιήονα κούροι Ἀχαιῶν,  
μέλποντες ἐκάεργον. ὁ δὲ φρένα τέρπετ' ἀκούων.

(e) "Ζεῦ πάτερ, εἴ ποτε δὴ σε μετ' ἀθανάτοισιν ὄνησα.  
ἦ ἐπει ἡ ἔργω, τὸ δέ μοι κρήνην ἐέλωρ :  
τίμησόν μοι υἱόν, ὃς ὠκυμωρώτατος ἄλλων  
ἔπλετ' : ἀτὰρ μιν νῦν γε ἀναξ ἀνδρῶν Ἀγαμέμνων,  
ἡτίμησεν : ἐλὼν γὰρ ἔχει γέρας, αὐτὸς ἀπούρας.  
ἀλλὰ σύ πέρ μιν τίσον Ὀλύμπιε μητίετα Ζεῦ :  
τόφρα δ' ἐπὶ Τρώεσσι τίθει κράτος, ὄφρ' ἂν Ἀχαιοὶ  
υἱὸν ἐμὸν τίσωσιν ὀφέλλωσιν τε ἐ τιμῇ."

2. Write notes on any five of the following words, giving 10  
Old Indo-Aryan (Vedic or Sanskrit) equivalents :—

βῆ, ἀργυρεοιο, βιοῖο, αἶδε, εἰπών, προσέφη, ἔξετο,  
οἶσθα, ζώντος, δερκομένοιο, ἐκατόμβη, κρείων, ποθι, ἦσθαι, εἰσι,  
ἱππους, εἶδης, ἀέκουσα, γυνή, ἐρρέε.

3. Give the principal parts of *four* of the following verbs— 10  
*λύω, δίδω, πείθω, εἶκω, καλέω, ἡγέομαι, τίκτω,  
 ἰλάσκομαι, ἐρχόμαι, ἐλάω, ἔπω, φεύγω, ἀμείβω, τιμάω, ὀλλύμι,  
 φαίνω, πίπτω, στείρω, πειράω, γηθέω, κρῖνω*
4. Decline the Greek pronouns for the first and second persons 10
5. Give a short account of the Greek dialects, classifying them genealogically, and indicate the place of the Homeric dialect among the various forms of ancient Greek. 10
6. Discuss the historical background of Homer. 10
7. Institute a comparison between the world of Homer and the world of the Rigveda. 10

## HISTORY

### FIRST PAPER

*The questions are of equal value.*

### FIRST HALF

*Examiner*—MR. R. B. RAMSBOTHAM, M.A., B.LITT., M.B.E.

*Not more than THREE questions to be attempted.*

1. 'When, one day in January, 1822, Mr. Peel walked into the Home Office, a fresh wind blew through the dim corridors, a wind that was the breath of the opening nineteenth century.'  
 Explain the meaning of this description.
2. Give a brief account of the Colonial development of the British Empire between 1815 and 1865.
3. 'During his life the condition of England may be described as one of political repose.'  
 Is this an accurate description of Lord Palmerston's political career?
4. How far is Lord Melbourne's character reflected in the policy followed during his prime-ministership?
5. Contrast the History of Scotland and Ireland during the first half of the nineteenth century.

### SECOND HALF

*Examiner*—DR. A. P. DASGUPTA, M.A., PH.D.

*Answer any THREE.*

1. What do you know of the Tory revival under Disraeli?
2. Examine the part played by Disraeli in the Eastern Crisis of 1875-78.
3. 'The steps of the second Gladstone government were, indeed, doomed from first to last to be dogged by a succession of untoward and intractable situations—some of them wholly unforeseeable; others unexpected in the shape which they actually assumed; and all combining to bring about the indefinite postponement of most of the hopes with which its advent had been hailed.' (*Asquith*.) Expand.

4. Write a short essay on Imperialism as a factor in British history in the last quarter of the 19th century.
5. Discuss the part played by Queen Victoria as a constitutional sovereign.

## SECOND PAPER

*The questions are of equal value.*

*Not more than THREE questions to be attempted from each half.*

## FIRST HALF

*Examiner*—DR. HEMCHANDRA RAYCHAUDHURI, M.A., PH.D.

1. Sketch the history of the Śaiśunāga dynasty, explaining clearly the different views about the succession and chronology of the kings.
2. Give an account of the Parthian supremacy in India, noticing in detail at least one Indo-Parthian king. (Refer to your sources of information.)
3. Examine the historical data supplied by the inscriptions of Gautami-putra and Pulumāyi and discuss their chronology.
4. Explain, with the aid of a sketch map, the political history of India in the sixth century A.D.
5. Write a note on the life and times of Pulakeśin II, indicating your sources of information.
6. Describe the reigns of Dhruva and Govinda III, with special reference to their military expeditions.
7. 'The Buddhist Constantine was all the greater than his Christian prototype, because he did his very best to enforce in his own personal life as well as in his empire the tenets of his creed.' Explain.

## SECOND HALF

*Examiner*—DR. RAMESCHANDRA MAJUMDAR, M.A., PH.D.

8. Review the historical importance of the Periplus of the Erythraean Sea.
9. What do you know of the Dravidians? Have they left any traces of their language and culture in Northern India?
10. Give a general review of the system of government as presented in Kautilya's Arthasāstra, with special and detailed reference to the foreign policy and methods of dealing with seditious persons.
11. Describe the monuments left by Asoka and indicate their position with the aid of a sketch map.
12. Examine the nature and value of the evidence contained in the works of Greek and Latin authors which bears on social and political conditions in India during the Maurya period.
13. Discuss the theory of Manu about the origin of the mixed and degraded castes.
14. Write a note on village and municipal administration in Ancient India.

## THIRD PAPER

*The questions are of equal value.*

## FIRST HALF

*Examiner—MR. INDUBHUSHAN BANERJEE, M.A.*

*Answer Question 1 and any TWO of the rest.*

1. Comment on any three of the following :—

(a) 'I am one void of rebellion against his lord : Siut is content under my rule, Herakleopolis praiseth God for me, the Nomes of the South and the Lauds of the North say, "Lo ! whatsoever the prince commandeth, that is the command of Horus (the king)."'

(b) 'In the 29th year of Sehetepabara, living for ever, they came to overthrow Wawat.'

(c) 'At length they made one of themselves king, whose name was Salatis, and he lived at Memphis and made both Upper and Lower Egypt pay tribute, and left garrisons in places that were most suitable for them. And he made the eastern part specially strong, as he foresaw that the Assyrians, who had then the greatest power, would covet their kingdom and invade them.'

(d) 'One besieged Sharuhén for three years and his majesty took it. Then I took captive there two women and one hand. One gave to me the gold of bravery besides giving me the captives for slaves.'

(e) 'Anon gave to me all the allied countries of Zahi shut up in one city. I snared them in one city, I built around them with a rampart of thick wall.'

(f) 'Verily, thy father did not march forth, nor inspect the lands of the vassal-princes. And when thou ascendedst the throne of thy father's house, Abdashirta's sons took the king's land for themselves. Creatures of the king of Mitanni are they, and of the king of Babylon, and of the king of the Hitties.'

2. Give a clear and concise account of the political organisation of Egypt in the days of the Pyramid Builders. Trace the course of events that led to its dissolution after the fall of the VIth dynasty.

3. On what lines would you proceed in order to settle the chronology of the XIIth dynasty? Account for the wide divergence of views among Egyptologists.

4. 'In no element of their life are there clearer evidences of change and development than in the religion of the Middle Kingdom Egyptians.' Elucidate.

5. What light do the 'Tell-el-Amarna Letters' throw on the causes of the collapse of Egypt's first empire in Asia?

6. Write a short history of the restoration of the Egyptian empire by Seti I and Ramses II. Contrast the restored empire with that of Thutmose III and his successors.

## SECOND HALF

*Examiner—MR. P. N. BANERJEE, M.A., B.L., Bar.-at-Law*

*N.B.—Candidates will answer THREE questions and THREE questions only from this half.*

1. Comment on the following :—

(a) 'Amraphel, King of Shinar, Arioch, King of Ellasar, Chedor-lamzer, King of Elam, Tidal, King of Garrym, subdued Mesopotamia and Hauman.'

- (b) 'Awake, awake, Deborah :  
 Awake, awake, utter a song;  
 Arise, Barak, and lead thy captors captive, thou son of  
 Abinoam.  
 The Kings came and fought;  
 Then fought the Kings of Canaan  
 In Taanach by the waters of Megiddo '

(c) 'Behold upon the mountains the feet of him that bringeth good tidings, that publisheth peace!.....Woe to the bloody city..... Behold, I am against thee, saith the Lord of Hosts, and I will discover thy skirts upon thy face and I will shew the nations thy nakedness and the kingdoms thy shame.'

2. 'David, Solomon, Rehoboam, are paralleled in Egypt by Thothmes III, Amenhotep III, and Akhenatin.' Discuss.

3. What date would you assign to Hammurabi, and why?

4. Give an account of the position of women in Babylonia from your study of the code of Khammurabi. How did they compare with their sisters in Egypt?

5. Write a connected history of either Urartu or Elam.

6. 'The real value of the Prophets lies in the significance of their utterances for contemporary needs; they were forthtellers rather than foretellers.' Discuss.

7. Write notes on any four of the following :—

- (a) The quest of eternal life in the poems of Gilgamesh.
- (b) The black obelisk of Nimrod.
- (c) The 'Synchronus history.'
- (d) The rock inscription of Behistun.
- (e) The allegory, if any, behind the descent of Ishtar into Hades.
- (f) Berossos.

#### FOURTH PAPER

*The questions are of equal value.*

#### FIRST HALF

*Examiner—MR. K. ZACHARIAH, M.A.*

*Answer Question 1 and any two others*

1. Comment on any four of the following passages :—

(a) If any one demand justice before a 'sc'irman' or other judge and cannot obtain it, and a man (the defendant) will not give him 'wedd' let him make 'bot' with XXX shillings, and within VII nights do him justice. (*Laws of Ins.*)

(b) And let every man so order that he have a 'borh'; and let the 'borh' then bring and hold him to every justice.

(*Edgar, Secular Ordinances.*)

(c) These are the rights that the king has over all men in Wessex : that is, mundbryce and hamsocn, forsteal and fyrdwite, unless he will honour any man more highly.

(*Canute, Secular Dooms.*)

(d) The law of King Edward I give to you again with those changes with which my father changed it by the counsel of his barons. (*Charter of Henry I.*)

(e) If controversy shall arise between laymen, or clergy and laymen, or clergy, regarding advowson and presentation to churches, let it be treated or concluded in the court of the lord the king. (*Constitutions of Clarendon*.)

(f) The recognition of *novel disseisin*, *mort d'ancestor*, and *darrein presentment* shall be held only in their own countries. (*Magna Carta*.)

(g) The writ which is called *praecipe* shall not be given for the future to any one concerning any tenement by which a free man can lose his court. (*Magna Carta*.)

(h) None but the king from henceforth shall hold plea in his Court of a false judgment given in the Court of his tenants; because such pleas do especially belong to the king's crown and dignity. (*Provisions of Westminster*.)

(i) For no business from henceforth we shall take of our realm such manner of aids, tasks, nor prises, but by the common consent of all the realm, and for the common profit thereof, saving the ancient aids and prises due and accustomed. (*Confirmatio Cartarum*, 1297.)

(j) We do ordain that the king henceforth shall not go out his realm, nor undertake against any one deed of war, without the common assent of his baronage, and that in parliament. (*Ordinances of 1311*.)

2. Sketch the history and explain the characteristics of tenure by knight service in England.

3. How far was an official career open to men of talents but of humble birth in the middle ages?

4. To what extent was taxation a reason for the summons of knights and burgesses to parliament in the 13th century? Trace the steps by which Parliament acquired control over taxation, up to 1486.

5. 'The control of the Council was the chief object of the struggle between king and barons.' Illustrate this statement from the 13th and 14th centuries.

6. Were any valuable contributions to the growth of the constitution made in the middle ages as the result of rebellions or threats of rebellion?

7. Trace the history of ecclesiastical courts and spiritual jurisdiction up to 1600.

## SECOND HALF

*Examiner*—MR. TRIPURARI CHAKRABARTI, M.A.

*Answer Question 1 and any two others.*

1. Comment on any four of the following passages :—

(a) That it was a most perilous precedent that, after two knights of a county were duly elected, any new writ should issue out for a second election without order of the House of Commons itself. (*Norfolk election*, 1586.)

(b) You, Mr. Speaker, should perform the charge her Majesty gave you at the beginning of this parliament not to receive bills of this nature. (*Speech of Cecil*, Nov. 23, 1601.)

(c) This seat, which God, by my birthright and lineal descent, had, in the fulness of time, provided for me.

(*Speech of James I*, March 19, 1604.)

(d) The king commits and often shows no cause; for it is sometimes generally, 'per speciale mandatum domini regis.' (*Attorney-General Heath's Argument in the case of the Five Knights*, Nov., 1627.)

(e) The king of mere right ought to have, and the people of mere duty are bound to yield unto the king, supply for the defence of the kingdom.

(*Sir Robert Berkeley in the Ship Money Case*, 1638.)

(f) Expressly contrary to the said Statute and other good laws of this our kingdom, under colour and pretence of an Ordinance of Parliament.....the trained bands and militia of this kingdom have been lately, and are intended to be put in arms. (*King's Proclamation, May 27, 1642.*)

(g) That no person who has an office or place of profit under the king or receives a pension from the Crown shall be capable of serving as a member of the House of Commons. (*Act of Settlement, 1701.*)

(h) A motion being made and the question put, that Henry Lawes Luttrell, Esquire, is duly elected a knight of the shire to serve in this present Parliament for the country of Middlesex. (*Commons' Journals, May 8th, 1769.*)

(i) That, on every such trial, the jury sworn to try the issue may give a general verdict of guilty or not guilty upon the whole matter put in issue upon such indictment or information. (*Libel Act, 1792.*)

(j) That the right of granting Aids and Supplies to the Crown is in the Commons alone, as an essential part of their Constitution. (*Resolution of the Commons, 1860.*)

2. 'The prerogatives of princes may easily and do daily grow: the privileges of the subject are most part at an everlasting stand.' (*Apology of the House of Commons, 1604.*)

Examine this reflection on the Government of the Tudors.

3. What is the constitutional importance of the office of Justice of the Peace under Elizabeth and the first two Stuarts?

4. What were the rival theories of Sovereignty which found expression in the reigns of James I and Charles I?

5. Sketch the development, and the political ideas, of the Tory Party from the Restoration to the death of Queen Anne.

6. Discuss the part played by the Judiciary of the 18th century in maintaining popular liberties.

7. 'There may be at any moment two doctrines of privilege, the one held by the Courts, the other by either House, the one to be found in the Law Reports, the other in Hansard.'

Explain and illustrate this difficulty under the Victorian Parliaments.

8. Describe the main features of the development of English Local Government from the beginning of the 19th century to the passing of the Local Government Act of 1929.

## FIFTH PAPER

### FIRST HALF

**Examiner—MR. SATISCHANDRA CHAKRABARTI, M.A.**

*Only THREE questions may be attempted from this half.*

1. What are the 'sources' of International Law? Discuss the influence of Roman Law on the development of International Law.

2. Give a lucid exposition of the Articles of the Covenant of the League of Nations dealing with the prevention of war. 'War is recognised and adopted as a police measure by the Covenant.' Discuss.

3. Write a historical note on the principle of non-extradition of political criminals. Carefully explain the term 'political crime'.

4. When and to what extent can a State exercise criminal jurisdiction over foreigners? Fully discuss this question by reference to illustrations.



5. State and annotate any *three* of the following cases :—

- (1) The Exchange (1810).
- (2) The Indian Chief (1800).
- (3) The Kim (1916).
- (4) The Appam (1916).
- (5) The Behring Sea Arbitration (1893).
- (6) The Huascar (1877).

### SECOND HALF

*Examiner*—PROF. ARTHUR BROWN, M.A., LL.B.

*Answer any THREE.*

1. Write short notes on the international status of any *three* of the following : (a) Iraq, (b) the Panama Canal, (c) the Saar Valley, (d) Iceland.
2. Expound the status and privileges of Red Cross societies in land and naval war and discuss the manner in which possible abuse is provided against.
3. Write a historical note on the theory and practice of neutrality.
4. Write short notes on any *three* of the following : (a) spies, (b) prisoners of war, (c) war treason, (d) the Declaration of Paris (1856), (e) the Declaration of St. Petersburg (1864).
5. Sketch the history of the doctrine of continuous voyage and discuss the extension given to this doctrine during the world war.

### (HISTORY OF BENGAL)

### SIXTH PAPER

*The questions are of equal value.*

### FIRST HALF

*Examiner*—MR. INDUBHUSHAN BANERJEE, M.A.

*Answer any THREE of the questions.*

1. Sketch the reign of Nawab Mir Kassim, indicating clearly the causes of his downfall.
2. What were the abuses in the service of the East India Company in Bengal and how did Clive reform them in 1765?
3. Comment on the trial of Maharaja Nundcoomar, with special reference to the powers and jurisdiction of the Supreme Court.
4. Estimate the part played by Warren Hastings in the affairs of Cheyt Singh and the Begum of Oudh.
5. Write a critical review of the Indian career of Philip Francis. Can you trace any permanent result of his activities?

### SECOND HALF

*Examiner*—DR. SUBODHCHANDRA MUKHERJEE, M.A., D.Litt.

*THREE questions to be attempted.*

1. On what grounds did Clive justify his acceptance of the Dewani? To what extent were his expectations fulfilled?

2. Are you prepared to say that the Frontier policy of Warren Hastings was a natural development from that of Lord Clive? Give reasons for your answer.

3. How did Warren Hastings give effect to the decision of the Directors 'to stand forth as Dewan'? What were the characteristic defects of his scheme?

4. Indicate the successive steps that led to the separation of the judicial from the revenue administration.

5. 'I gave you all, and you have rewarded me with confiscation, disgrace, and a life of impeachment.' (Warren Hastings.)

Discuss the validity of the statement.

### SEVENTH PAPER

*The questions are of equal value.*

*Six questions to be attempted, THREE from each half.*

#### FIRST HALF

*Examiner—MR. JITENDRANATH BANERJEE, M.A.*

1. What was meant by the Company's 'Investment'? Point out the distinction between the gomastah system and dadni merchants. Which was found advantageous by experiment, and why?

2. 'Since the accession of the Company to the Dewanee the condition of the people of this country has been worse than it was before.' (Fischer.)

Elucidate the statement with reference to the economic condition of Bengal after 1765.

3. Describe the nature of the currency difficulties that afflicted Bengal during your period. How did Cornwallis finally solve them?

4. On what grounds does Verelst justify Clive's formation of the salt society? Give a brief account of the organization and the method of working of this society.

5. Draw a picture of life in Calcutta in the days of Warren Hastings.

#### SECOND HALF

*Examiner—DR. A. P. DASGUPTA, M.A., PH.D.*

6. 'From 1757 to 1765 the troubles of Bengal had been due to trade abuses.' Amplify.

7. Can you criticise the measures adopted for collection of land revenue in Bengal by Warren Hastings?

8. Give the gist of Shore's ideas relating to land revenue administration, showing where he differed from Grant and Cornwallis.

9. Give your opinion on the Permanent Settlement of Bengal.

10. Give an account of the sources of information available for the study of the social and economic condition of Bengal during the second half of the 18th century.

## (RAJPUTS)

## SIXTH PAPER

*Examiner*—DR. HEMCHANDRA RAY, M.A., PH.D.*The questions are of equal value*

## FIRST HALF

*Attempt THREE questions only.*

1. Give an account of the struggles of the Chaulukyas (*Solankis*) of Anahilapāṭaka with Muslims.
2. Briefly review the life and administration of the Chaulukya Kumārapāla, with special reference to his epigraphic records.
3. Write a short note on the rise and origin of the Chāhamānas of Śākambharī, with special reference to the reign and epigraphic records of Vīrabharāja IV (c. 1153-64).
4. 'The power of the Paramāras of Lāṭa and Mālava reached its zenith during the reigns of Vākpati Muṇja (c. 974-95) and Bhoja (c. 1010-55).' Discuss this statement.
5. Write a note on the Tomaras of Delhi or the Kachchhapaghāṭas of Gwalior.

## SECOND HALF

*Examiner*—DR. HEMCHANDRA RAY, M.A., PH.D.*Attempt THREE questions only.*

1. Write a short account of the reigns of the Chandrātreyas (*Chandella*) princes Gaṇḍa and Vidyādhara.
2. The Gurjara-Pratihāra king Rājyapāla is 'the chief of all princes of India.' Discuss this statement.
3. Give an account of the Gāhaḍavāla (*Gaharwar*) ruler Govindachandra (1114-55), with special reference to contemporary records.
4. Briefly review the career of the Haihaya (*Kalachuri*) king Lakshmi Karna of Tripuri.
5. Give a short account of the various Rāshtrakūṭa (*Rathor*) dynasties of Northern India during the period c. 575-1310 A.D.

## SEVENTH PAPER

*The questions are of equal value.**Attempt THREE questions from EACH half*

## FIRST HALF

*Examiner*—MR. SUBIMALCHANDRA DATTA, M.A.

1. 'The general thesis that some of the nobler Rajputs septs are descended from Gurjaras or other foreigners, while others are closely connected with the autochthonous races, may be regarded as definitely proved.' Carefully examine the above statement.

2. What are the principal sources for the reign of Rāval Jaitrasimha of Mevād? What account can you build upon them?

3. What, in your opinion, are the causes of Alauddin Khilji's attack upon Chitor? What value do you attach to the Padimini episode?

4. Give a critical account of the activities of Chunda, son of Rana Lakha. Do you agree with the Mevad version of his life-story?

5. Write an account of the reign of Rana Vikramadit. What is its constitutional importance?

## SECOND HALF

*Examiner*—RAI SAHEB HARBILAS SARDA

1. Discuss, stating your authorities, whether the Rathors of Rajputana and Central India are descendants of the Gaharwar Jayachand of Kanauj.

2. Discuss how far the Rathors contributed to the consolidation of the Moghul empire in the days of Akbar and Jahangir.

3. Describe, in detail, the political career of Maharaja Jaswant Singh of Marwar during the reign of Shah Jahan and Aurangzeb.

4. Give a brief account of the life and work of Maharaja Ajitsingh of Marwar.

5. Describe and discuss the comparative value of the sources of the history of the Rathors.

## (HISTORY OF THE MARATHAS)

### SIXTH PAPER

*The questions are of equal value*

*Only THREE questions from EACH half need be answered.*

### FIRST HALF

*Examiner*—DR. SURENDRANATH SEN, M.A., B.LITT., PH.D.

1. What were the main features in the situation of Maharashtra which contributed to the rise of Shivaji?

2. What influence did Ramdas exercise in the effort of Shivaji to establish the Maratha Raj?

3. Mention the various original sources of Shivaji's life and discuss their relative value.

4. Discuss the attitude of Shivaji towards Islam.

5. Describe the military organization of Shivaji, with special reference to his forts, mentioning also some of the stirring incidents of his life in that connection.

### SECOND HALF

*Examiner*—MR. G. S. SARDESAI, B.A.

6. Write an account of Shahji and point out how far Shivaji was indebted to him for the success he achieved.

7. Describe the ceremony of Shivaji's coronation, and shew what significance Shivaji attached to it in the constitution which he formed.

8. Write a short sketch of the life of Sambhaji and shew why he failed against Aurangzeb.

9. Describe the character and achievements of Rajaram and discuss the results of his policy on the future of the Maratha Kingdom.

10. Point out the value of the services rendered by Ramchandrapant Amatya for the national cause.

## SEVENTH PAPER

*The questions are of equal value*

### FIRST HALF

*Examiner*—DR. H. C. ROYCHAUDHURI, M.A., PH.D.

*Not more than THREE questions to be attempted.*

1. Describe the steps taken by the first three Peshwas to restore the authority of the central Maratha government in the Konkan.

2. 'The Sea has always been a more or less strange element to the Marathas.' Critically examine this statement, with special reference to the career of Kanhoji Angria.

3. Discuss the relations of the Nizam with the Marathas during the period 1727 to 1761 A.D.

4. Point out the lessons of the battles of Panipat (1761) and Khardā (1795). Compare Sadāsiva B. āo and Nānā Farnavis as statesmen and organisers.

5. Write a note on the development of the Maratha power in the Central Provinces in the latter half of the eighteenth century.

6. Give a brief account of village autonomy in Mahārāshṭra in the time of the Peshwas.

### SECOND HALF

*Examiner*—MR. TRIPURARI CHAKRABARTI, M.A.

*Answer THREE questions.*

1. How do you explain the failure of the Marathas to conquer Bengal in the 18th century.

2. Sketch briefly the history of the struggle between the Bhonslas and the Peshwas for supremacy in the Maratha Empire.

3. Give a general account of the Maratha policy towards the Gangetic powers in the latter half of the 18th century.

4. Examine the conduct and policy of Raghunath Rao in the War of the Maratha Succession.

5. Discuss Sindhiās' military policy and its effects.

6. Write a short essay on revenue administration under the Peshwas.

## (HISTORY OF THE SIKHS)

## SIXTH PAPER

*The questions are of equal value.*

Six questions to be attempted, THREE from each half

## FIRST HALF

*Examiner*—MR. INDUBHUSHAN BANERJEE, M.A.

1. 'Love and devotion enlighten the mind.' How far did the *Bhakti* movement produce a general awakening in the country and what part was played by Sikhism in it?

2. Write a note on the Holy Granth and estimate its importance as a source-book of Sikh history

3. 'We are neither Hindus nor Mussalmans.' (*Guru Arjan*.) How far was this idea developed in the history of the Sikhs and what historical causes prevented it from being put to the practice in full?

4. Discuss critically any three of the following :—

(a) Guru Nanak's visit to Baghdad and Mecca.

(b) The invention of the Gurumukhi Alphabet.

(c) Guru Arjan's help to Prince Khusrō.

(d) Conversion of Hill chiefs by Guru Amar Das and Guru Arjan.

(e) The imprisonment of Guru Hargovind.

5. Examine fully the causes that led to the transition to militarism under Guru Hargovind. To what extent was it determined by previous developments in Sikhism?

## SECOND HALF

*Examiner*—MR. TEJA SINGH, M.A.

6. Trace the history of the gradual weakening of Sikh solidarity after the death of Guru Hargovind. How were the difficulties met by Guru Govind Singh?

7. Give an account of Guru Govind Singh's quarrels with the Hill Rajas during the pre-Khalsa period. To what extent would you rely on the Guru's own descriptions as given in the *Vicitra Natak*?

8. Write a critical comment on the alleged worship of the Goddess Durga by Guru Govind Singh.

9. 'Guru Govind Singh made nationalism a religion.' (*Narang*.) Discuss and illustrate.

10. 'The true Khalsa under Banda preferred to maintain their religious principles at the cost of immediate political ascendancy, which would have come 50 years earlier than it actually did if they had only been a little more accommodating in their religious spirit.' Discuss.

## SEVENTH PAPER

*The questions are of equal value.*

Six questions to be attempted, THREE from each half.

## FIRST HALF

1. Discuss the relative importance of the Ahluwalia and Ramgarhia misls in the Sikh struggles of the latter half of the eighteenth century.

*Examiner*—DR. HEMCHANDRA RAYCHAUDHURI, M.A., PH.D.

2. Describe the constitution of the Sikh confederacy after the final withdrawal of Ahmad Shah Durrani.

3. Write notes on any *two* of the following :—

(a) The Battle of Haidaru.

(b) The Sikh conquest of Multan.

(c) Sikh relations with Jammu and Kangra.

4. Write a critical note on British diplomacy in the Cis-Sutlej territory in 1809 and in Sind in 1831-1832. Do you find any points of resemblance?

5. Compare the type of Lahore official represented by Fakir Azizuddin with that represented by Dhian Singh.

## SECOND HALF

*Examiner*—MR. INDUBHUSHAN BANERJEE, M.A.

6. Examine the state of political parties in the Punjab at the death of Ranjit Singh. Explain the part played by No Nehal Singh in the subsequent developments and estimate the repercussions of his untimely death on the fortunes of the Lahore monarchy.

7. How does the Sikh army in the early years of Maharaja Ranjit Singh compare with the Khalsa soldiery in the days of Maharaja Dalip Singh in point of organisation and efficiency?

8. Give a brief account of Sikh-Afghan relations from 1831 to 1848. How were matters complicated by the interference of the English?

9. How did Hardinge deal with the Punjab question after the conclusion of the First Anglo-Sikh War? What made his settlement so unsteady and short-lived?

10. Explain the Sikh strategy in the Second Anglo-Sikh War. To what causes would you attribute the final defeat of the Khalsa army?

## (CHINA AND JAPAN)

### SIXTH PAPER

*The questions are of equal value*

### FIRST HALF

*Examiner*—MR. TRIPURARI CHAKRABARTI, M.A.

*Answer THREE questions only*

1. What is the importance of the period 1834-1860 in Chinese history?

2. Write notes on the following :—

(a) The Chefoo Convention of 1876; (b) Treaty of St. Petersburg, 1881; (c) Lansing-Ishie Agreement, 1917.

3. Discuss the present problem of jurisdiction at the Treaty Ports in China.

4. Sketch the history of China's relations with Japan from the Treaty of Tien-tsin, 1871, to the Treaty of Shimonoseki, 1895.

5. Review the Franco-Chinese relations during the latter half of the 19th century.

## SECOND HALF

*Examiner*—DR. P. C. BAGCHI, M.A., D.LITT.

*Answer THREE questions only*

1. Point out the importance of the Yang-tse valley in the political and economic history of China in the 20th century.
2. Discuss the influence of sea power upon Chinese history in the 19th and 20th centuries.
3. Sketch the genesis of the Boxer movement in China. What were the subsequent results of the movement?
4. Show how the Washington Conference of 1921-1922 did attempt to solve the problem of China.
5. Describe the essential features in the history of the Chinese Revolution from 1911-1931.

## SEVENTH PAPER

*The questions are of equal value*

*Attempt any THREE questions from EACH half*

## FIRST HALF

*Examiner*—MR. NARAYANCHANDRA BANERJEE, M.A.

1. Discuss the circumstances which led to the restoration of the Imperial authority in Japan. What were the factors that contributed to the downfall of the Shogunate?
2. 'Feudalism was thus partly driven and partly lured to its own destruction.' Discuss.
3. Discuss the attempts for the introduction of the Cabinet system in Japan and estimate the measure of its success.
4. Discuss the position of the Emperor in the Japanese Constitution and indicate the extent of the authority actually exercised by him. Give some idea of the Emperor-worship in Japan.
5. Review the relations between Japan and Korea from 1894 to 1905.

## SECOND HALF

*Examiner*—DR. RAMESCHANDRA MAJUMDAR, M.A., PH.D.

1. Review the relations between Japan and China since the outbreak of the Great War.
2. Discuss the characteristics of industrialism in Japan and its social and economic consequences.
3. Estimate the contributions of any two of the following to the evolution of modern Japan :—
  - (a) Emperor Matsuhito.
  - (b) Count Okuma.
  - (c) Prince Katsura.

4. 'In 1905 the Japanese had gained universal admiration; by 1910 they had come to be as widely disliked and distrusted, especially in the Anglo-Saxon world.'

Discuss the above, and state your own views regarding the international outlook on Japan, say in 1935.



5. Write critical notes on the following :—

- (a) Communism in Japan.
- (b) Immigration disputes with America.
- (c) Corruption in Japanese political life.

## (HISTORY OF ISLAM)

### SIXTH PAPER

*The questions are of equal value*

### FIRST HALF

*Examiner*—DR. S. N. SEN, M.A., B.LITT., PH.D.

*Only THREE questions are to be attempted.*

1. Explain the principles followed by the Arabian Prophet in his dealings with non-Muslim communities.

2. Carefully explain the procedure that was followed in the election of the four Pious Caliphs. Can it be asserted that there was a regular system of election or nomination to the Caliphate?

3. Give a careful account of the character and the activities of the Kharijites.

4. 'Austere, unscrupulous, clear-headed, outwardly observant of all religious duties but never permitting any human or divine ordinances to interfere with the prosecution of his plans or ambitions—such was Mu'awiyah.' (*Amir Ali*.) Discuss with reference to the chief events of his career.

5. Comment upon the following :—

(a) 'Ye have heard the sentence of Abu Musa. He hath deposed his candidate and I too depose him. But as for my chief. Mu'awiyah, him do I confirm.' (*Amr ibn As*.)

(b) 'Beware, for verily it is as if I saw many a head before me all gory in its blood. If you reform not forthwith, there will soon be widows and orphans enough amongst you.' (*Hajjaj ab Kufa*.)

(c) 'Is the House of Umeiya awake or is it slumbering still?' (*Nasr ibn Seiyar*.)

6. Give a brief account of the expansion of the Omayyad Empire under Weliid bin Abdul Malik. Illustrate your answer with a map, if possible.

### SECOND HALF

*Examiner*—DR. S. N. SEN, M.A., B.LITT., PH.D.

*Attempt any THREE questions*

1. Explain the importance of Mokka before and after Islam.

2. To what extent was Medina responsible for the success of Islam?

3. Write a short note on the Conquest of Persia.

4. 'High, indeed, was the status of women and unhampered was their freedom in the early days of Islam.' Discuss this statement.

5. 'No one not acquainted with Arab historical works can form any idea of the immense industry which they involve.' Examine this statement.

## SEVENTH PAPER

*The questions are of equal value*

*Only THREE questions from each half need be answered*

## FIRST HALF

*Examiner—DR. SURENDRANATH SEN, M.A., B.LITT, PH.D.*

1. Institute a comparison between Sultan Mahmud of Ghazni and Mahammad of Ghur as soldiers and empire builders.
2. Can Shams-ud-din Iltutmish be rightly regarded as the second founder of Muslim power in India?
3. Give an estimate of Muhammad bin Tughluq as a man and ruler.
4. Is it fair to compare Firuz Tughluq with Akbar?
5. Write a short account of the political condition of India on the eve of Babar's invasion.

## SECOND HALF

*Examiner—MR. K. D. BANERJI, M.A.*

1. Was Babar a mere military adventurer? Give a reasoned answer.
2. Give a critical estimate of Sher Shah's achievements.
3. Discuss some of the fundamental principles of Akbar's revenue settlement.
4. Account for the failure of Mogul policy in Central Asia.
5. Draw pen-pictures of any two of the following characters :—  
Ranah Pratap; Rani Durgavati; Chanda Sultana; Shahjahan.

## (COMPARATIVE POLITICS)

## SIXTH PAPER

*The questions are of equal value*

*THREE questions only are to be answered from EACH half.*

## FIRST HALF

*Examiner—DR. UPENDRANATH GHOSHAL, M.A., PH.D.*

1. 'There is one form of government which is set before us in the earliest glimpses we get of the political life of at least all the European members of the Aryan family.' (*Freeman*.)  
Apply this dictum to the oldest political institutions of the Greeks, the Romans, and the Germans.
2. 'As Athens realised the most perfect form of democracy of which the City-State was capable, so did Rome realise the most perfect form of oligarchy.' (*W'arde Fowler*.) Account for this difference, and illustrate it as fully as you can from the history of the constitutions concerned.
3. Account for the decline of the City-State, and indicate the lessons that can be drawn therefrom.
4. Distinguish Greek and Roman methods of administration of justice.

5. Examine Maine's view of the place of legislation in the ancient polity.
6. Compare the constitution of the Achaean League with the constitution of any modern federal constitution.

### SECOND HALF

*Examiner*—MR. SANTOSHKUMAR CHATTERJEE, M.A.

1. Analyse the leading features of the ideal States of Plato and Aristotle, and consider their implied criticism of the current types of constitution and forms of government in Ancient Greece.
  2. Write what you know of the democratic movements in the mediæval Italian cities. In what respects do they differ from the corresponding movements in the Ancient Greek City-States?
  3. How far in your view was the Ancient Indian kingship limited by legal and constitutional checks?
  4. Indicate the distinctive characteristics of the Feudal Polity and explain the services rendered by it to mediæval society.
  5. Mediæval Papacy has been described by Hobbes as the ghost of the Holy Roman Empire sitting crowned on its grave. Do you agree?
  6. Account for the failure of mediæval parliamentary institutions.
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### SEVENTH PAPER

*The questions are of equal value*

### FIRST HALF

*Examiner*—MR. P. N. BANERJEE, M.A., B.L., BAR-ATLAW

*Answer THREE questions only*

1. Which form of constitution would you like to have for India, Federal or Unitary, and why?
2. How would you deal with the question of (a) minorities, (b) Indian States, in a future constitution for India?
3. What are the powers which the Crown in England has reserved to itself in the constitutions of (a) Canada, (b) the Irish Free States?
4. Illustrate the importance of 'conventions of the constitution' in the practical working of the constitution of the United States.
5. How far is the Soviet Constitution in Russia novel in character?
6. In what ways may it be said that the growth of economic interests and organisations has adversely affected the working of modern parliamentary institutions?
7. How far has the doctrine of separation of powers been adopted in actual practice in the constitutions of (i) England, (ii) Germany, (iii) France?
8. 'The success of federal government is greatly favoured by, if it does not absolutely require, approximate equality in the different countries which make up a confederation.' Examine the bearing of Dicey's remark with reference to the prospects of the League of Nations.

## SECOND HALF

*Examiner*—MR. TRIPURARI CHAKRABARTI, M.A.

*Answer any THREE questions*

9. Compare American federalism with federalism in Canada.
10. 'The outstanding feature of the Swiss form of Government is that, although political parties exist, party government does not.' Explain the absence, in this and other democratic communities, of government by party.
11. 'Rigid constitutions are compatible with progress only because they are, in practice, extremely flexible.' To what extent does the experience of modern States support this observation?
12. Account for the multiplicity of parties in France.
13. What is your account of the relationship between the Quirinal and the Vatican in Italy? How has this affected (i) International politics, (ii) National politics, (iii) Local politics?
14. What are the rights of the individual in the German Constitution?
15. What do you understand by Parliamentary form of Government? How far is it true to say that parliamentary government has failed in England?
16. What provisions exist for the amendment of the constitution in (i) England, (ii) U.S.A., (iii) Germany?

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(MODERN EUROPE)

## SIXTH PAPER

*The questions are of equal value*

*Answer any THREE questions from EACH half*

## FIRST HALF

*Examiner*—MR. SUSOBHANCHANDRA SARKAR, B.A. (Oxon.)

1. How far was the Concert of Europe, after the Congress of Vienna, a compromise between the ideas of Castlereagh and of Alexander I?
  2. Account for the predominance of Austria over Prussia, in European politics, from 1815 to 1848.
  3. Give a comparative estimate of the constitutionalist movements in Spain and Portugal, in the first half of the nineteenth century.
- Or,*
- Was there a revolution in British foreign policy under Canning?
4. Critically examine the foreign policy of France, in the eastern part of Europe, from 1815 to 1848. How far was it consistent and successful?
  5. Give a short history of Socialism before Karl Marx and account for its comparative failure.

## SECOND HALF

*Examiner*—MR. Y. J. TARAPOREWALLA, M.A.

1. Estimate the rôle of Talleyrand at the Congress of Vienna. Did it benefit France?

2. On what grounds and to what extent can the policy of Metternich be defended?

3. Why did the policy of the Duce de Decazès fail in France?

Or,

What was the influence of Chateaubriand and Lamartine on French history?

4. 'Pius IX believed he was granting mere administrative reforms, but he found himself, to his horror, that he was in a powder magazine with a lighted candle.' Discuss this situation in the light of events in Italy on the eve of the Revolution of '48.

5. Trace the history of Poland down to 1848 and estimate its importance in European history.

### SEVENTH PAPER

*The questions are of equal value*

*Answer only THREE questions from EACH half*

#### FIRST HALF

*Examiner*—MR. ARTHUR BROWN, M.A., LL.B.

1. Discuss the distribution of peoples in the Balkan Peninsula and criticise the settlement made by the Congress of Berlin in the light of subsequent history.

2. Sketch the social and political organisation of the Russian Empire at the death of Nicholas I, and estimate the value of the reforms of Alexander II.

3. Give a short account of the Third French Republic and enumerate its chief problems. Discuss the solution of these problems along with the development of Parliamentary Government.

4. Discuss the solution of the constitutional and racial problems in Austria-Hungary during your period. Sketch the constitution of 1867.

5. Write critical notes on any *three* of the following :—

- (a) The State socialism of Bismarck.
- (b) Liberal movement in Turkey under Abdul Hamid II.
- (c) Italian colonial expansion in the nineteenth century.
- (d) The Dreyfus Affair.
- (e) Republican experiment in Spain (1873).

#### SECOND HALF

*Examiner*—DR. NARAYANCHANDRA BANERJEE, M.A., PH.D.

1. Write a note on the history of the idea of 1789 ('Liberty, Equality, and Fraternity') in France during your period.

2. Discuss the problems facing the Italian government after the unification of Italy, and show how these problems influenced Italian foreign policy.

3. Write a note on the expansion of Russia in Central Asia and the Far East during your period and show the effect of this expansion on her relations with (a) Great Britain, (b) Japan.

4. Discuss the effect on the foreign policy of Germany of the dismissal of Bismarck by the Emperor William in 1890.

5. Sketch in outline the main provisions of the treaties by which Great Britain and France, in 1904, settled their outstanding differences in various parts of the world and thus laid the foundation of the *entente cordiale*.

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(ECONOMIC HISTORY)

SIXTH PAPER

*The questions are of equal value*

FIRST HALF

Examiner—MR. SUSOBHANCHANDRA SARKAR, M.A.

*Attempt any THREE questions*

1. What are the sources of our information for the reconstruction of the history of the manor in England?
2. Explain carefully the relation between the municipalities on the one hand and the guild merchants and the craft guilds on the other, in mediæval England.
3. Indicate the part played by the fairs in English economic development.
4. Examine the position of women in industry during the Middle Ages.  
Or,  
Point out the influence of the Church on mediæval economic ideas and institutions.
5. Give a short outline of the economic policy of the central government in England from the Norman to the Tudor period.

SECOND HALF

Examiner—MR. K. D. BANERJEE, M.A.

*Attempt any THREE*

1. How far is it accurate to regard Capitalism as a product of the Industrial Revolution?
2. Indicate the different stages in the history of Trade Union organisation in England and mention their salient features.
3. Account for the abandonment of the policy of *laissez faire* in England in the 19th century.
4. Explain the arguments used in favour of and against the retention of the Corn Laws in the second quarter of the 19th century.
5. Is it possible to account for the fact that the Industrial Revolution took place first in England?

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SEVENTH PAPER

*The questions are of equal value.*

FIRST HALF

Examiner—DR. J. P. NİYOGI, M.A., PH.D.

*Answer any THREE questions*

1. What was the nature of the currency problem which faced Cornwallis on his arrival in Bengal? How did he attempt to solve it?

2. Describe the state of the handicrafts in India during the early years of the nineteenth century. To what causes do you ascribe their decay?

3. State the circumstances that led the Government of this country to intervene with a view to protect the interest of the tenants. Briefly describe the principles underlying tenancy legislation, and state the provisions of the Bengal Tenancy Amendment Act of 1928.

4. Sketch the history of the Indian steel industry. To what extent has its growth been facilitated by tariffs?

5. 'India is a vast aggregation of villages.' Comment on this statement and compare the industrial organisation of India with that of Great Britain.

## SECOND HALF

*Examiner*—DR. A. P. DASGUPTA, M.A., PH.D.

*Answer any THREE*

1. What do you know of banking organizations in Bengal during the second half of the 18th century?

2. How did the Crimean War, the American Civil War, and the Franco-German War influence Indian trade and industry in the 19th century?

3. Sketch the history of the Indian jute mill industry from 1854 to the present day.

4. Briefly describe the origin and later developments of the Indian Cotton Excise Duty.

5. Trace the growth of the Trade Union movement in India, and discuss some of the difficulties which the movement has to contend with in this country.

## (ESSAY)

### EIGHTH PAPER

<i>Examiners</i> —	{	MR. R. B. RAMSBOTHAM, M.A., B.LITT, M.B.E
		DR. H. C. RAYCHAUDHURI, M.A., PH.D.
		MR. P. N. BANERJEE, M.A., B.L., BAR.-AT-LAW
		„ T. CHAKRABARTI, M.A.
		„ ARTHUR BROWN, M.A., LL.B.
		„ S. N. SEN, M.A., B.LITT, PH.D.
		„ I. BANERJEE, M.A.
		„ S. C. DATTA, M.A.
		„ T. CHAKRABARTI, M.A.
		DR. N. C. BANERJEE, M.A., PH.D.

*The figure in the margin indicates full marks.*

Write an essay on any one of the following subjects :—

100

1. British social, constitutional, and colonial development during the Victorian age.

- (2) 'Harsha was a worthy successor to the glories of the Mauryas and the grandeur of the Guptas.'
- (3) Egypt's and Babylon's contribution to civilisation.
- (4) Prerogative, Parliament, and Common Law in English constitutional development during the sixteenth and seventeenth centuries.
- (5) Freedom of the High Seas.
- (6) Free thinking in Islam.
- (7) Maratha Navy under the Angrias.
- (8) 'The Sikhs are not, and never have been, a nation in any intelligible sense.'
- (9) Mewar's part in Rajput struggle for freedom.
- (10) Survival of Mughal institutions in the British Administrative System in Bengal during the latter part of the eighteenth century.
- (11) Post-war Protectionist Movement in India.
- (12) The spirit of the Chinese Revolution in the twentieth century.
- (13) The sovereignty of the British Dominions.
- (14) Ancient democracy: its lessons for modern times.
- (15) Canada and Australia as models for federalism in India.
- (16) Nationalism and Imperialism in the nineteenth century.

## ECONOMICS

### FIRST PAPER

*The questions are of equal value*

*Only THREE questions are to be attempted from EACH half.*

#### FIRST HALF

**Examiner—MR. HARICHARAN GHOSH, M.A.**

1. How far may the differences of average economic welfare in different countries be attributed to greater or less density of population?
2. Examine the importance of the concept of marginal utility in Economics
3. What are the ultimate real costs to which the money costs of production correspond?
4. 'It is by the marginal firm as by the marginal farm that prices in industry as in agriculture are determined.' Examine this statement, with reference both to the conditions of increasing returns and diminishing returns
5. How far does the free play of self-interest tend to distribute the country's resources in the way most favourable to the production of the largest possible National Dividend?

#### SECOND HALF

**Examiner—MR. N. S. SUBBARAO, M.A.**

6. Explain the meaning and theoretical importance of the concept of Quasi-rent. What is the relation in the long run between quasi-rents and normal profits?



7. Discuss the chief means and agencies by which the mobility of (a) Labour, and (b) Capital can be promoted.

8. 'We have insufficient evidence to warrant the assertion that the particular rate of interest which happens to prevail is a measure of the sacrifice involved in 'the marginal saving.' Comment on this, and discuss the effect of changes in the rate of interest on the supply of capital.

9. Explain the influence of modern financial or marketing organization on the size of the business unit.

10. Discuss the underlying principles of Scientific Management and indicate its potential influence on the earnings and welfare of labour.

## SECOND PAPER

*The questions are of equal value*

### FIRST HALF

**Examiner—MR. ROHINIMOHAN CHAUDHURI, M.A.**

*Attempt ANY THREE questions.*

1. 'The real difficulty with regard to price stabilisation is simply the determination of the level from which to start.'

Comment on this statement with regard to its theoretic implications and its bearing on post-war currency changes.

2. 'No country can permanently gain or lose in respect of its natural advantages for industries by changes in the external value of its currency unit.' Elucidate the statement.

3. Trace the parallelism between international trade and trade between non-competing groups.

4. What are the circumstances that have led Labour to demand an increased control over industrial management? How far can this demand be advisedly conceded?

5. What are the factors that have determined the distribution of gold in recent years? Distinguish between the monetary and non-monetary causes in operation.

### SECOND HALF

**Examiner—DR. J. P. NIYOGI, M.A., PH.D.**

*Attempt ANY THREE questions.*

1. Compare the merits and demerits of the different methods of the formulation of the Quantity theory of money.

2. 'The Federal Reserve System of America was expected to protect the country's financial and industrial structure against the impact of international gold movements.'

Describe the main features of the Federal Reserve System and indicate how far this system has been successful in attaining the desired end.

3. 'The post-war gold standard is fundamentally different from the pre-war gold standard.' Comment on the statement.

4. 'So long as credit is regulated with reference to reserve proportions, the trade cycle is bound to recur.' Do you support this view?

5. Compare the economies of vertical and horizontal combinations in modern industries.

## THIRD PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—PROF. S. C. RAY, M.A.

*Attempt only THREE questions.*

1. Criticise Mill's doctrine that it is 'a necessary condition of free institutions that the boundaries of States should coincide in the main with those of nationalities.'

Contrast this with Lord Acton's thesis that it would be advantageous to have many nationalities in a single State.

2. Discuss the application of the doctrine of Natural Selection to social philosophy. Is the process of cosmic nature similar to the ethical process of human society? Define *Progress* with reference to the conclusions you arrive at.

3. What are the nature and characteristics of the great world force called *Imperialism*? By what processes does Imperialism operate and what have been its reactions on the East?

4. How would you differentiate between the social contract theories of Locke and Rousseau? Indicate the methods by which it was sought to limit political power by natural law, natural rights, and the principle of the social contract.

5. Discuss the constitutionality of the existing Government of Italy. In what sense can it be said, with plausibility, that the present executive is not a Dictator but an instrument of Democracy?

6. Examine the nature of the relation between the State and the individual. Show how socialisation and individualisation are different aspects of the same question and how society and the individual can be harmonised in a perfect democracy.

## SECOND HALF

*Examiner*—MR. DURGAGATI CHATTORAJ, M.A.

*Answer ANY THREE questions*

1. Write a short history of the 'Law of Nature.' What has been its influence on political thought? Is the conception of the 'Law of Nature' fanciful or absurd as some political philosophers suggest?

2. Democracy involves (1) political organisation, (2) industrial organisation, (3) social or cultural standards operative in daily intercourse. Explain.

3. Write a short note on the theory of the State as Power versus the theory of the State as Justice.

*Or,*

Write a short note on the Executive as a political institution.

4. How did property originate?

'Property is more than seizure and appropriation of an object for the supply of a passing need.' Explain.

5. 'The Internationalists would shackle Leviathan with chains while the Pluralists would perform necessary operations on his interior.' Discuss.

6. What in your opinion is the function of Punishment in the State?

## M.A. EXAMINATION

## FOURTH PAPER

*The questions are of equal value*

## FIRST HALF

**Examiner**—MR. W. C. WORDSWORTH, M.A., M.L.C.

*Answer THREE questions only*

1. Comment on Lowell's statement that the Home Secretary is a kind of residuary legatee. What are his chief duties, and how is the Home Office organized?

2. 'The abolition of the monarchy would mean the dissolution of the Empire.' Discuss this statement.

3. Describe the leading tendencies in public finance in Great Britain since the war.

4. How do you account for the numerical weakness of the Liberal Party in the House of Commons nowadays? In what sense does the party contribute to political stability?

5. Examine the arguments for an Economic Parliament separate from the ordinary legislature.

6. Discuss the statements (1) that the British Parliament is overwhelmed with legislation and cannot adequately discharge its functions; (2) that the British Parliament has permitted the permanent Civil Service to encroach on its sphere.

## SECOND HALF

**Examiner**—PROF. PRAMATHANATH BANERJEA, M.A., D.Sc.  
M.L.C.

*THREE questions only to be attempted*

1. 'The Secretary of State for India is vested with greater power over the administration of India than was ever exercised by the Great Moghul.' Examine the statement with reference to the relations of the Secretary of State with the British Parliament and the Governor-General in Council.

2. If you were asked to prepare a scheme of an All-India Federation, what would be your main proposals? Give reasons for the suggestions you make.

3. Discuss the position and powers of Ministers in the Governors' Provinces under the Government of India Act.

4. Give a brief account of the Famine Taxes imposed in India in 1877-1878.

5. Briefly describe the methods of taxing intoxicating liquors and drugs in India.

In case a policy of prohibition is adopted for Bengal, what steps would you take to meet the resulting deficit?

6. Critically examine the main sources of revenue and the chief heads of expenditure of the Government of India, and suggest changes which you consider necessary or desirable.

## (GROUP A.)

## FIFTH PAPER

## FIRST HALF

*Examiner*—MR. BIJAYKUMAR SARKAR, A.B.*Answer ANY THREE questions*

1. Explain briefly, but clearly, the fundamental essence of Mercantilism.

2. 'Smith, indeed, might well be regarded as a fore-runner of Socialism.'

Comment on the statement.

3. Give a critical estimate of the place of J. S. Mill in the history of economic thought.

4. Explain briefly, but clearly, what you consider to be the special contribution of German writers to the development of economic doctrine.

5. Give a brief critical estimate of the contribution made to economic thought by *any three* of the following :—

(a) Louis Blanc, (b) Senior, (c) Ruskin, and (d) Bernstein.

## SECOND HALF

*Examiner*—MR. BHUJANGADHUSHAN, MUKHERJEE, M.A.*Answer ANY THREE questions*

1. 'Tariff Reform was protection with a new name.'

Explain the above, and indicate the circumstances which led, in recent times, to a demand for the modification of Free Trade in England.

2. Give a brief account of the growth and development of joint-stock banking in England. How far does it meet the needs of modern trade and industry?

3. Trace the growth of the co-operative movement in England. Discuss, in this connection, the special difficulties of co-operation in India.

4. Is England still the workshop of the world? State and explain the recent developments which have affected her position in this respect.

5. Trace the growth of capitalism in England. Discuss its merits and defects. Suggest safeguards which will make it work more in the interest of the community as a whole.

## (GROUP B)

## FIFTH PAPER

*Examiner*—MR. JOHN KELIAS, M.A.*The questions are of equal value*

## FIRST HALF

N.B.—*Answer Question 1 and two more from this half.*

1. Comment on *any two* of the following :—

(a) 'Hear then, said he (Thrasymachus), for I say that what is just is nothing else but the advantage of the more powerful.' (Plato's *Republic*.)

(b) 'And the State is the union of families and villages having for an end a perfect and self-sufficing life, by which we mean a happy and honourable life.'

(Aristotle's 'Politics'.)

(c) 'The citizen should be moulded to suit the form of government under which he lives.' (Aristotle's 'Politics'.)

2. Explain clearly the central theme of the 'Republic.' How does Plato propose to realize his political objective?

3. Explain the views of Plato and Aristotle on the sphere of State action.

4. Trace the influence of the Stoics on Roman political thought.

5. Briefly review the history of the doctrine of natural law.

## SECOND HALF

**Examiner—MR. NIRMALCHANDRA BHATTACHARYA, M.A.**

**N.B.—Answer Question 1 and two more from this half.**

1. Comment on any two of the following :—

(a) 'A prince, therefore, being compelled knowingly to adopt the beast, ought to choose the fox and the lion.' (Machiavelli's 'The Prince'.)

(b) 'So that in the nature of men we find three principal causes of quarrel. First, competition; secondly, diffidence; thirdly, glory.' (Hobbes' 'Leviathan'.)

(c) 'The state of nature has a law of Nature to govern it, which obliges everyone; and reason, which is that law, teaches all mankind, who will but consult it, that all being equal and independent, no one ought to harm another in his life, health, liberty, or possession.'

(Locke's 'Second Treatise'.)

(d) 'Every member of the community at the moment of its formation gives himself up to it, just as he actually is, himself and all his powers, of which the property that he possesses forms part.' (Rousseau's 'Social Contract'.)

2. Consider carefully the claim that Machiavelli is the founder of modern political theory.

3. 'There was a Rousseau whose political influence was in the direction of an extreme individualism, as there was a Rousseau whose work produced a collectivism of a certainty not less extreme.' Explain this statement with reference to political thought after Rousseau.

4. Is it correct to say that 'mediævalism contains elements of modernism' as far as political theory is concerned? Elucidate and illustrate the statement.

5. Give a short historical review of the doctrine of sovereignty.

## (GROUP A)

### (BANKING AND CURRENCY—FIRST PAPER)

#### SIXTH PAPER

*The questions are of equal value*

#### FIRST HALF

**Examiner—MR. B. R. RAO, M.A.**

**THREE questions only to be answered**

1. Discuss briefly the chief obstacles in the way of New York becoming the leading international financial centre.

2. 'The percentage system of note-issue appears to combine all the possible defects of systems of note regulation.'  
Discuss.

3. Explain the functions of industrial banks and show how far the existing structure of the Indian banking system can be amended or developed to meet the needs of industry.

4. Comment on the chief obstacles in the way of organising an Indian Overseas Bank for financing the foreign trade of India. To what extent have the Exchange Banks been serviceable to us in the past?

5. Give a short account of the Loan Companies of Bengal and the position they occupy in the banking system of the province. Can you suggest any practical remedies for improving their position?

## SECOND HALF

*Examiner*—DR. B. B. DASGUPTA, M.A., D.Sc., Ph.D.

*Answer ANY THREE*

1. Discuss briefly the powers and functions of the Bank for International Settlements.

*Or,*

Give an outline scheme for a Land Mortgage Bank for supplying long-period credit to Indian agriculturists.

2. Do you advocate regulation of banks by law? If so, what sort of laws would you advocate?

3. Discuss generally the advantages of a Central Bank and in particular the assistance that it renders in combating industrial booms and depressions.

4. What, in your opinion, are the reasons for the slow progress of banking in India? What suggestions would you make for accelerating development?

5. Give a short account of the banking system of England or U.S.A.

## (GROUP A)

(BANKING AND CURRENCY—SECOND PAPER)

## SEVENTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—MR. AKSHAYKUMAR SARKAR, M.A.

*THREE questions are to be answered*

1. Explain some methods of measuring movements of general prices. Point out the principal difficulties involved, and indicate the precautions by means of which it is attempted to overcome them. How far or within what limits do you consider that trustworthy results are obtainable?

2. Explain what is meant by the Bank rate of discount. What is the connexion between the Bank rate and Market rate? What course does the Bank of England take to make its rate effective?

3. Discuss the view that 'the most powerful influence determining the value of the currency unit of any country is the credit of the State.'

4. Contrast the organisations of England and Germany for the supply of capital for industrial, as distinguished from commercial, purposes.

5. What provision was made by the Federal Reserve Act with respect to (1) participation in the Federal Reserve system, and (2) definition of paper eligible for discount by the Reserve Banks in order to ensure a 'strictly commercial' banking system.

## SECOND HALF

*Examiner*—MR. S. K. RUDRA, M.A.

*THREE questions only to be answered*

1. Give a brief history of India's currency system since 1893.

2. Discuss the nature of the demand for gold currency in India in the sixties of the last century and subsequently.

Comment on the attitude of the Government of India and also of the Home Government in this respect.

3. Describe the characteristic features of the 'Gold Bullion Standard.' Compare it with Ricardo's 'Gold Ingot Plan.'

4. 'Stability of exchange was the supreme consideration with Government; and everything else was subordinated to this end.'

Discuss the above statement regarding the management of the Indian currency.

5. Discuss the significance of the following dates in the history of Indian currency :—

1835, 1861, 1899, and 1926 A.D.

## (GROUP A)

(INTERNATIONAL TRADE—FIRST PAPER)

## SIXTH PAPER

*The questions are of equal value*

*Answer ANY THREE questions from EACH half*

## FIRST HALF

*Examiner*—MR. A. C. SENGUPTA, M.A.

1. Discuss the comparative merits and demerits of studying international trade in terms of money and in terms of barter.

2. What are the possible effects of an export duty on the country imposing it? In this connection consider some of the export duties imposed in India in recent years.

3. Under what conditions will you justify protection of an indigenous industry? What different forms can such protection take? What are the advantages and disadvantages of each?

4. Examine the views (a) that dumping tends to stabilise industry, and (b) that dumping means a present by one nation to another and should therefore be welcome to the nation receiving the present.

5. Discuss, from the point of view of international trade, the policy of Germany in stabilising her currency after the Great War.

## SECOND HALF

*Examiner*—DR. J. C. SINHA, M.A., PH.D.

6. Explain the theory of comparative cost. In what respects, if any, does this theory differ from the principle of territorial division of labour?

7. Comment on the following statements :—

(a) 'Complete freedom of trade would bring about an equalization of money wages all over the world.'

(b) 'But for cost of carriage, every commodity (if trade be supposed free) would be regularly imported or regularly exported.'

8. How far is protective tariff a suitable agency for (a) the reduction of unemployment, and (b) the raising of wages?

9. Discuss the importance of international gold movements in the theory of foreign trade. Do you think that such movements are likely to be less frequent in future?

10. Examine the case for granting protection to the Indian sugar industry.

## (GROUP A)

## (INTERNATIONAL TRADE—SECOND PAPER)

## SEVENTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—DR. J. P. NIYOGI, M.A., PH.D.

*Answer ANY THREE questions*

1. Discuss the advantages of the Maximum-Minimum tariff system of France. How far has this system proved to be a good means of obtaining tariff concessions by means of negotiations?

2. Examine the effect of Protection on the growth of the American iron and steel industry. To what extent was this growth promoted by other factors?

3. Trace the growth of Protection in India since the outbreak of the Great War.

4. Examine the validity of the arguments used in the U.S.A. for a policy of Protection at different stages of the tariff controversy.

5. 'Employed as a means of retaliation, the system of tariff restriction is disastrous, as a means of preference it is improper, as an encouragement to an exotic industry it is powerless and futile.'

Critically examine this statement in the light of tariff history.

## SECOND HALF

*Examiner*—MR. K. B. SAHA, M.A.

*Answer ANY THREE questions*

1. Account for the Protectionist reaction in Germany after 1871.

2. Explain how protective duties may affect prices and money incomes in a country.



In what circumstances may such duties bring more advantageous terms of international exchange? Do you consider that any sound argument in favour of Protection can be based on this?

3. Critically examine the view that ordinary protective duties are no safeguards against dumping.

4. Explain the importance of cost analysis in fixing tariff rates. What are the limitations of the 'principle of equalising costs'?

5. 'When a protective import duty is imposed, the burden inflicted on the consumers is not a net burden to the country, but is a mere transference of wealth to other persons in the country.'

Do you agree with this statement? Give reasons for your answer.

### (GROUP A)

#### (MATHEMATICAL ECONOMICS—FIRST PAPER)

#### SIXTH PAPER

*The questions are of equal value*

*Only THREE questions to be attempted from EACH half*

#### FIRST HALF

*Examiner—MR. BRAJAKISOR DATTA, M.A.*

1. Write a short note on the Mathematical method.

Show mathematically that 'the remuneration of the different agents of production according to their marginal services exhausts the national dividend.'

2. Examine critically the Optimum Theory of Population.

3. Explain how far the concept of a representative firm is adequate in solving the problem of value under increasing returns.

4. 'The origin of interest is not the difference between the value of present and prospective commodities.' Comment upon it.

5. Explain carefully that in railway rates 'the cost of service principle corresponds to simple competition and the value of service principle to discriminating monopoly of the third degree.'

#### SECOND HALF

*Examiner—MR. HARICHARAN GHOSH, M.A.*

1. Trace and prove the normal shape of the Integral demand curves. Show that they are loci of the points where the straight lines from the origin touch one or other of the constant utility curves.

2. Explain the 'Expansivity of demand.' How is it related to elasticity of demand?

Can you measure elasticity of supply from an Integral supply curve?

3. Account for the shape of the Zero Indifference curves. Prove the general characteristics of the Indifference curves.

4. 'The gain resulting from a premium to producers is essentially less than the public sacrifice at the cost of which the gain is attained.' (Cournot.) Support it mathematically.

5. Show that the increment of price due to the imposition of a tax on a commodity depends upon the elasticity of demand and supply of the commodity.

How far is elasticity of supply a necessary factor in price-determination?

(GROUP A)

(MATHEMATICAL ECONOMICS—SECOND PAPER)

SEVENTH PAPER

*The questions are of equal value*

*Only THREE questions to be attempted from EACH half*

FIRST HALF

Examiner—MR. BRAJAKISOR DATTA, M.A.

1. 'The price which any individual is willing to pay is simply the ratio between two marginal utilities—that of a commodity and that of money.' (Fisher.) Explain.

Point out the qualifications involved in the use of money as an instrument of utility (a) of different objects to same persons, and (b) of the same object to different persons.

2. Explain the use of Marshall's 'Compromise benefit curves.'

Show that the proportion in which amount demanded increases in consequence of a small fall in price varies directly as the square of the price.

3. 'It seems a matter of course that when cost of production increases the price fixed by the monopolist will increase likewise.' (Cournot.) Can you support this by a mathematical demonstration?

4. 'The general definition of Increasing returns comprehends a particular and limiting case in which difference in degree almost amounts to a difference in kind.' (Edgeworth.) Explain.

5. Examine the factors which determine the amount of rent from a piece of land. How can a change in the price of the produce affect (1) its absolute rent, (2) rent per unit of outlay?

SECOND HALF

Examiner—MR. HARICHARAN GHOSH, M.A.

1. 'The differential calculus unlocks the treasure-chamber of the pure theory of Economics.' Comment upon it.

2. Discuss the concept of consumers' surplus and the difficulty of accurately representing it in the rate demand curve.

3. 'An aggregate demand or supply schedule is always made up by the simple addition of a number of independent demand or supply schedules.' Carefully examine this statement and point out the limitations, if any, of this usual assumption.

4. How is it possible for increasing returns to prevail in any industry without leading to the monopolisation of the whole market by a single producer?

5. Examine critically the statement: 'Economic analysis warns us that, as a general rule, bounties lead to economic waste.'

## (GROUP A)

## (STATISTICS—FIRST PAPER)

## SIXTH PAPER

*The questions are of equal value*

*Answer ANY THREE questions from EACH half*

## FIRST HALF

*Examiner—PROF. G. FINDLAY SHIRRAS*

1. Describe the main contributions of Galton to the science of statistics.
2. Carefully explain :—

(a) Frequency distribution; (b) standard deviation; (c) correlation coefficient and correlation ratio.

Show the use of each.

3. A population consists of  $X$  individuals, of whom  $X_1$  are white. A random sample of  $Y$  individuals contains  $Y$  white. Show that the coefficient of variation of  $Y$  from sample to sample is

$$100 \sqrt{\{(X - X_1)/X, Y\}}$$

4. If you were to conduct a statistical investigation into trade cycles in India, carefully describe the factors which in your opinion will require analysis.

5. Is  $(I_1 I_2)^{\frac{1}{2}}$  theoretically the best formula for an index number, where

$$I_1 = \sum q_0 p_1 / \sum q_0 p_0$$

$$I_2 = \sum q_1 p_1 / \sum q_1 p_0$$

the  $q$ 's referring to quantities and the  $p$ 's to prices at the two dates?

How far is it practicable to compile such an index number?

## SECOND HALF

*Examiner—DR. HARISCHANDRA SINHA, M.Sc., Ph.D.*

1. Given :—

Age	No. of deaths in a year per thousand
25-35	165
35-45	333
45-55	711

Find the numbers corresponding to age groups 30-40 and 40-50.

2. Calculate roughly the coefficient of correlation between income and rent from the following data :—

Weekly rents	WEEKLY INCOME					Total cases
	Rs. 15 to Rs. 20	Rs. 20 to Rs. 25	Rs. 25 to Rs. 30	Rs. 30 to Rs. 35	Rs. 35 to Rs. 40	
Rs. 2 to Rs. 4 ...	1	1	1	0	0	3
Rs. 4 to Rs. 6 ...	5	16	8	7	5	41
Rs. 6 to Rs. 8 ...	3	14	13	14	9	58
Rs. 8 to Rs. 10 ...	0	0	0	1	2	3
Total cases ...	9	31	22	22	16	100

	Averages	Standard Deviations
Incomes ...	Rs. 27.75	6.0
Rents ...	„ 6.12	1.21

3. Describe the difference between the earnings of balers and boiler-cleaners from the following data :—

	Balers	Boiler-cleaners
	Rs. A. P.	Rs. A. P.
Mean earnings per day ...	1 2 1	1 2 1
Lower quartile ...	0 15 0	0 14 0
Median ...	1 2 0	0 15 8
Upper quartile ...	1 4 9	1 2 0

4. The following are the numbers of accidents in a regiment in England and Wales during the 20 years from 1892 to 1911 inclusive. Do the numbers show any greater variation than what might be expected from the fluctuations of sampling alone?—

Year	Number	Year	Number
1892	16	1902	29
1893	16	1903	25
1894	18	1904	18
1895	10	1905	17
1896	20	1906	8
1897	7	1907	10
1898	10	1908	12
1899	15	1909	19
1900	14	1910	16
1901	15	1911	16

5. Explain the methods for calculating the number of rupees in circulation. How far in your opinion can an estimate based upon any of these methods be relied upon?

## (GROUP A)

## (STATISTICS—SECOND PAPER)

## SEVENTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner—MR. SURENDRANARAYAN BANERJEE, M.A.**Only THREE questions to be attempted*

1. What methods can be employed for estimating the population of India and of parts of it in years other than those of the censuses? Which method do you consider best, and why?
2. Explain and criticise the main features of the scheme of classification of occupations which was adopted in the census of India (1921).
3. Write a short note on the difficulties in the compilation and manipulation of wage statistics in India.
4. Describe the statistical material available for determining the total amount of cotton manufactures in India, pointing out any substantial difficulties in the data.
5. What are the advantages and disadvantages of using 'official' and 'declared' values respectively in the compilation of the statistics of imports and exports? Refer to the practices of a few of the more important commercial countries of the world in this connection and analyse the bearing of these practices on the comparability of trade balances.

## SECOND HALF

*Examiner—PROF. G. FINDLAY SHIRRAS**Only THREE questions to be attempted*

1. The following data are taken from 'Statistical Tables relating to British and Foreign Trade and Industry' (Cmd. 3737, 1930) :—

(a) Standard hourly time rates of money wages in Great Britain, Germany, France, and the United States in July, 1930, were respectively 1s 8½d. (London), 1.54 Reich marks (New York), 20.43 marks to £1, 124.21 francs to £1, 4.86½ dollars to £1.)

- (b) Index number of comparative *real wages* in certain large towns of various countries in January, 1930 :—

				Index numbers in relation to Great Britain (=100).
United States	...	...	...	197
Canada	...	...	...	165
Australia	...	...	...	148
Germany	...	...	...	77
France	...	...	...	68
Italy	...	...	...	48

What conclusions can be drawn from the data? Point out with care the limitations to such conclusions.

2. Describe the various items on which enumerators had to collect information at the recent census of India.

What were the measures taken to ensure statistical accuracy? In what respects did the 1931 census differ from that of the 1921 and 1911 censuses?

3. Write a critical account of the method of compiling an official Cost of Living Index for British India. Illustrate, if possible, some of the difficulties from the Cost of Living Index published by the Labour Office of the Government of Bombay.

4. What are the items which you would include in the construction of an index of business activity in India?

How would you collect the information? Would you combine the results of the various indices in such a way as to produce a weighted index for all items?

5. How would you calculate invisible imports and exports in the case of one of the following countries: India; United Kingdom; the United States of America?

### (GROUP B)

#### (COMPARATIVE POLITICS—FIRST PAPER)

##### SIXTH PAPER

*The questions are of equal value*

##### FIRST HALF

*Examiner—DR. U. N. GHOSHAL, M.A., PH.D.*

*Answer THREE questions from EACH half*

1. Briefly describe the working of the democratic constitution of Athens. Point out any lesson from it for constitutions suited to modern democracies of the type of nation-states.

2. Explain how the federal constitution developed in Greece, illustrating from either the Achaean or the Aetolian league. What defects do you find in it that led to its final dissolution?

3. Describe the administrative and fiscal system that obtained in the Roman provinces. How did the system ultimately lead to the breakdown of democracy and give rise to the Empire?

4. Explain the principal features of *jus naturale* and show how it has affected the modern law of equity.

5. Describe the organisation of village administration as depicted in Kautilya's Arthashastra.

##### SECOND HALF

*Examiner—DR. PRAPHULLACHANDRA BASU, M.A., PH.D.*

1. Analyse the leading features of the ideal States of Plato and Aristotle, and consider their implied criticism of the current types of constitution and forms of government in Ancient Greece.

2. Examine Solon's place in the list of constitutional reformers, and indicate in what sense his work marked an epoch in the history of the city-state.

3. What approaches were made towards democratic development in Ancient Rome? How and why did these tendencies fail?

4. Describe the struggle between oligarchy and democracy in the mediæval Italian cities. In what respects did it differ from the corresponding struggle in Ancient Greece and Rome?

5. Discuss the limitations, moral and legal, to which the Ancient Indian kingship was subject.

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(GROUP B)

(COMPARATIVE POLITICS—SECOND PAPER)

SEVENTH PAPER

*The questions are of equal value*

FIRST HALF

*Examiner*—MR. P. N. BANERJEE, M.A., B.L., BAR.-AT-LAW.

*Answer six questions : THREE from EACH half*

1. 'The merits and defects of a non-parliamentary executive are the exact opposite of the merits and defects of a parliamentary executive.' (*Dicey*.) Discuss.

2. 'The accumulation of all powers, legislative, judicial, and executive, in the same hands, whether of one, a few, or many, whether hereditary, self-appointed, or elective, may justly be pronounced as the very definition of tyranny.' (*Federalist*.) Examine the accuracy of the statement by a comparative study of the constitutions of (i) England, (ii) U.S.A., (iii) Russia.

3. Explain what is meant by the checks and balances of the constitution. Enumerate the checks and balances in the constitutions of (1) England (2) U.S.A., (3) Germany.

4. Wherein does the constitution of Canada diverge from the normal Federal type?

5. Enumerate the powers the Crown in England has reserved to itself in the constitutions of (i) Australia, (ii) South Africa, (iii) the Irish Free state.

6. Wherein does the House of Lords in England differ from the Judicial Committee of the Privy Council as a Supreme Court of Judicature?

SECOND HALF

*Examiner*—MR. N. C. CHATTERJEE, M.A., BAR.-AT-LAW

7. Why are not great men chosen as Presidents in the U.S.A.?

8. How do the courts act as guardians of the constitution in (i) England, (ii) U.S.A., (iii) Germany?

9. Compare the powers and functions of the President of the Reich in Germany with those of the President of the U.S.A.

10. Compare and contrast (with respect to their composition and functions) (a) the Senate of the U.S.A. and the Senate of Canada, (b) the House of Commons in England and the House of Representatives in the U.S.A.

11. How would you deal with the question of minority representation in a future constitution of India?

12. How would you account for the comparative instability of the ministries in France?

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## (GROUP B)

## (INTERNATIONAL LAW—FIRST PAPER)

## SIXTH PAPER

*The questions are of equal value*

## FIRST HALF

**Examiner—MR. S. C. CHAKRABARTI, M.A.***Answer ANY THREE*

1. 'The Covenant (of the League of Nations) appears to be but one course of masonry in the future temple of International Law. Only a short-sighted critic would mistake it for the temple itself, and only one who is ignorant of the architecture of law would find fault with it for not being the finished structure.' Discuss this statement.

2. Write short notes on the international status of any three of the following: (a) The Papacy, (b) Tangier, (c) Cuba, (d) Korea, (e) Zanzibar.

3. Define 'Piracy.' 'Slave-trade is not piracy iure gentium.' Discuss.

4. 'The principle of territorial sovereignty and territorial jurisdiction overrides that of the authority of a State over its merchantmen when the two conflict.' Discuss this statement by reference to illustrative cases.

5. State and annotate any three of the following cases:—

(1) The *Caroline* (1838).

(2) The *Exchange* (1810).

(3) The case of *Savarkar* (1911)

(4) The *Malacca* (1904).

(5) The case of *Don Pantaleon Sá* (1653).

## SECOND HALF

**Examiner—PROF. ARTHUR BROWN, M.A., LL.D.***Answer ANY THREE*

1. State what you understand by 'International Law' and give your own opinion as to whether it is rightly so called.

Write a short note on the various schools of International Law.

2. Does International Law (apart from engagements which States may have entered into by express treaties) contain any principles relating to international rivers? How have the principal international rivers been dealt with by treaty?

3. Write a full note on diplomatic immunities from jurisdiction.

4. A text-book on International Law, published in 1904, contains a chapter entitled 'Rights or claims of States in relation to territory which fall short of sovereignty in its fullest shape.' This chapter enumerates such rights or claims and also gives leading examples of each. In the event of your bringing out an up-to-date edition of this text-book what alterations and amendments in this chapter would you be likely to make?

5. Write a note on criteria of nationality and show how far the principle of option has been used to solve the problem of double nationality.



## (GROUP B)

## (INTERNATIONAL LAW—SECOND PAPER)

## SEVENTH PAPER

*The questions are of equal value*

## FIRST HALF

**Examiner—MR. P. N. BANERJEE, M.A., B.L., BAR.-AT-LAW.***Answer SIX questions, THREE from EACH half*

1. 'Grotius's Jus getium was positive law instituted by the consent of all nations.' Is this a correct description of Grotius's position in *De Jure Belli ac Pacis*?
2. What are the respective positions of (a) India, (b) Canada, (c) Germany, (d) Japan, in the League of Nations?
3. What is the position in International Law of (a) British North Borneo Company, (b) Tanganyika, (c) Egypt, (d) Suez Canal, (e) Switzerland, (f) Belgium?
4. 'The League of Nations is an international person, *suigeneris*, something not to be likened to anything else.' Discuss.
5. What are mandatory territories? Where does sovereignty lie in such territories?
6. How far has modern International Law regulated the (i) use of aircraft (a) in time of peace, (b) in time of war; (ii) the use of submarines and poison gas in time of war?
7. Write notes on *any four* of the following :—
  - (a) The Alabama, (b) the Peterburg, (c) the Shenandoah, (d) the Sitka, (e) *In re Castioni*, (f) *In re Rauscher*, (g) *In re Savarkar*.

## SECOND HALF

**Examiner—MR. NIRMALCHANDRA CHATTERJEE, M.A., BAR.-AT-LAW.**

8. Enumerate some of the diplomatic immunities. How far do consuls possess them?
  9. Distinguish between (a) Recognition of Belligerency and Recognition of Insurgency, (b) Blockade and Pacific Blockade.
  10. How far does declaration of war affect treaties between the belligerents?
  11. What is the position of enemy subjects at the outbreak of war?
  12. 'International Law draws a sharp distinction between completed conquest and belligerent occupation.' How?
  13. Write notes on *any four* of the following :—
    - (a) Requisitions, (b) sequestration, (c) cartel ships, (d) *Levies en masse*, (e) *Francs tireurs*, (f) capitulations.
  14. What do you mean by the doctrine of 'free ships, free goods'? How far has this doctrine been affected by (1) the Declaration of Paris, 1856, (2) the last great war?
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## (GROUP B)

## (SOCIOLOGY—FIRST PAPER)

## SIXTH PAPER

*The questions are of equal value*

## FIRST HALF

**Examiner—MR. KHAGENDRANATH SEN, M.A.***Answer ANY THREE questions*

1. What are the principles of Applied Sociology? Explain with reference to the modern organization of charitable relief.
2. Explain the various measures, legislative or otherwise, which have been taken in modern countries to safeguard the interests of the child in society.
3. What are the most important features of the movement for criminal reform on the continent of Europe and in America?
4. Explain the scope of Eugenics and its bearing on the study of social problems.
5. What should be the essentials of a population policy for India?
6. What methods have been adopted in Bengal to attack the problems of juvenile crime and traffic in women? Have these been successful?

## SECOND HALF

**Examiner—MR. S. C. CHAKRABARTI, M.A.***Answer ANY THREE questions*

1. Write a note on the status of women in primitive society.
2. Define 'totemism.' Discuss critically the various theories of the origin of totemism.
3. How do you account for the existence of parent-in-law taboos among primitive people? Discuss this question, with special reference to the theories of Freud and Tylor.
4. 'There is no royal road to the comprehension of cultural phenomena.' Discuss.
5. Discuss briefly the conception of property in primitive society.

## (GROUP B)

## (SOCIOLOGY—SECOND PAPER)

## SEVENTH PAPER

*The questions are of equal value*

## FIRST HALF

**Examiner—MR. PRAMATHANATH SARKAR, M.A.***Answer ANY THREE questions.*

1. 'Economics and Politics are differentiated parts of Sociology, and are therefore distinct though co-ordinated sciences.' Discuss.

2. 'The primordial social fact is imitation.' (Tarde.)  
 'The elementary subjective fact in society is the consciousness of kind.' (Giddings.)

Critically examine these conflicting views.

3. 'There never have been and there never can be more than two great political parties in a nation.' Do you agree? State the reasons for your answer.

4. 'The real problems of sociology are left unsolved by the writers of the instinct school.' Elucidate.

5. 'Society is greater than the mere sum of its parts. Hence public opinion is superior to that of the average individuals and even of the best individuals.' Critically examine this dictum of Durkheim and McDougall.

## SECOND HALF

**Examiner**—DR. RADHAKAMAL MUKHERJEE, M.A., PH.D.

Answer ANY THREE questions.

1. Interpret psychologically (a) the phenomenon of social change, and (b) the permanence of social institutions.
2. Examine the applications of biology to the amelioration or improvement of human society.
3. Discuss the factors implied in the change of the existing code of marital morality in India.
4. What social factors are responsible for the multiplication of population in India? Discuss the social symptoms and effects of over-population.
5. Examine the significance of—
  - (a) oaths and ideals,
  - (b) Sankirtans,
  - (c) marriage processions,
  - and (d) death-rites,
 in India.
6. Illustrate the elements of race and cultural fusion in Bengalee social life and institutions.

## EIGHTH PAPER

<b>Examiners</b> —	{	PROF. S. C. RAY, M.A.
		„ P. N. BANERJEE, M.A., D.Sc.
		DR. H. C. SINHA, M.A., PH.D.
		„ J. P. NIYOGI, M.A., PH.D.
		MR. N. C. BHATTACHARYYA, M.A.
		„ R. N. CHAUDHURI, M.A.
		„ P. C. GHOSH, M.A.
		„ S. C. BANERJEE.
		„ K. N. SEN, M.A.
		„ S. K. CHAKRABARTI, M.A.
		„ P. N. BANERJEE, M.A., B.L., BAR.-AT-LAW
		DR. R. C. RAU.

The figure in the margin indicates full marks

Write an essay on any one of the following subjects :—

100

- (a) The place of the Indian States in the future constitution of India.
- (b) The future of Indian finance.

- (c) Trade depression : its causes and remedies.
- (d) The post-war protectionist movement in India.
- (e) The feminist movement.
- (f) Labour conditions in India during the post-war period.
- (g) The contribution of Professor Marshall to economic thought.
- (h) Statistical determination of fair wages in India.
- (i) Machiavellianism.
- (j) The danger to world peace from over-population.
- (k) The League of Nations : its success and failure.
- (l) Central Banks.

## ANCIENT INDIAN HISTORY AND CULTURE

### FIRST PAPER

*The questions are of equal value.*

#### FIRST HALF

*Examiner—DR. ABINASCHANDRA DAS, M.A., PH.D.*

*Only THREE questions are to be answered*

1. Prof. J. B. Haldane says that one of the cradles of the human race and civilization was somewhere between Afghanistan and the Punjab. Can you support this statement by the internal evidence of the R̥gveda and connect this early civilization with the beginnings of Aryan civilization?
2. Describe the domestic and social life of the Aryans in the Vedic age, writing short notes on their food, drink, and dress.
3. Trace the origin and development of Kingship in the early Vedic age, and describe the mutual obligations of the King and the People. What were the functions of the Sabhas and Samitis?
4. Write a brief description of the land where the R̥gvedic hymns were composed, mentioning the different tribes of the Aryan race that inhabited it and interpreting the terms Dasas and Dasyus in the light of the R̥gvedic mantras.
5. Describe the different modes of disposing of dead bodies in early Vedic times, as representing different stages of culture, and show how they have tended to persist down to the present times.

#### SECOND HALF

*Examiner—DR. U. S. SUKTHANKAR.*

1. Give a precise estimate of the historical value of the Indian epics. Explain the difficulties in the way of their utilization for culture-historical purposes with the help of a concrete instance of some social institution or practice such as the 'suttee' (widow immolation).

*Or,*

How do you account for the fact that while the early Brahmanical literature mentions on the one hand Śāntanu and Dhṛtarāṣṭra (Vaicitravīrya) and on the other hand Parīkṣit and Janamejaya, there is in it no mention of the Pāṇḍavas, who (according to the Mahābhārata) ruled in the intervening period and who were moreover very illustrious and renowned princes, in fact models of orthodox Kṣatriyas?

2. Describe the social conditions as reflected in the Sanskrit epics.
3. Give a brief sketch of Government in the Heroic Age of India, with special reference to the relations of the king with the priests, nobles, and the people.

*Or,*

Illustrate the early and late moral ideas in the Mahābhārata. Also sketch briefly the religious and philosophical views of the epics.

## SECOND PAPER

*The questions are of equal value.*

### FIRST HALF

**Examiner—DR. RAMESCHANDRA MAJUMDAR, M.A., PH.D.**

*Not more than THREE questions to be attempted*

1. What are our sources of information about Ajātasātru? Attempt a reconstruction of his life and the history of his time.
2. Write a historical note on the republican clans of ancient India.
3. Estimate the value and importance of the Purāṇas for the study of the political history of ancient India.
4. Discuss the place of Aśoka in the political and cultural history of India.
5. Write a critical review of Pushyamitra and his times.

### SECOND HALF

**Examiner—MR. NARAYANCHANDRA BANERJEE, M.A.**

*Not more than THREE questions to be attempted*

1. Discuss the history and chronology of Eucratides and Heliccles, always indicating your source of information.
2. Discuss the chronology of the Śātavāhana dynasty.
3. Discuss the early history either of the Vākāṭakas or of Pallavas.
4. Estimate the influence of foreign invasions on Indian history and culture from the sixth century B.C. to the third century A.D.
5. Write critical notes on any three of the following:—
  - (1) The kingdom of Sophytes.
  - (2) The Kidāra-kushāṇas.
  - (3) The Abhīras.
  - (4) The Chetās of Kalinga.
  - (5) The Yonas in Asoka's inscriptions.

## THIRD PAPER

*The questions are of equal value.*

### FIRST HALF

**Examiner—DR. HEMCHANDRA RAY, M.A., PH.D.**

*Attempt not more than THREE questions*

1. Give an account of the relations that existed between the Gurjara-Pratihāras of Kanauj, the Rāṣṭrakūṭas of Mānyakhetaka and the Arabs. Refer to your source of information.

2. Write a short note on the Kalachuris of Tripuri with special reference to the reigns of Gāṅgeyadeva and Lakṣmi-Karṇa.
3. Give a brief account of the struggles of the Cāhamānas of Sākambhārī with the Muslims and the Candellas.
4. Give an account of the reign of Anantavarman Coṭagaṅga with special reference to his epigraphic records.
5. Write a short account of the more important dynasties that ruled in Eastern Bengal during the period c. 950-1150 A.D.
6. Critically review the career and achievements of Lalitāditya Mukṭāpīḍa as given in the Rājatarāṅgiṇī of Kalhaṇa.
7. Give an account of the reign of the Chalukya (Solaki) Jayasimha Siddharāja with special reference to Jain and epigraphic records.
8. Write a short account of the first Pāla empire with special reference to—
  - (a) its extent.
  - (b) its foreign policy,
  - and (c) its attitude towards Brāhmanism and Buddhism.

## SECOND HALF

**Examiner—DR. HEMCHANDRA RAYCHAUDHURI, M.A., PH.D.**

*Not more than THREE questions to be attempted*

1. 'Pulakeśi II appears undoubtedly to have been the greatest prince of the early Chalukya dynasty; and his fame reached even foreign countries.' Critically examine this statement.
2. What light do contemporary records throw on the internal organisation of the early Chalukya empire?
3. Discuss the significance of the rule of the Rāshtrakūṭas from the point of view of the historian of Jainism and of Islam in India.
4. 'On the surface of the earth there is not a town like Kalyāṇa; never was a monarch like the prosperous Vikramāṅka seen or heard of.' To what extent is this eulogy justified?
5. Write critical or explanatory notes on any four of the following :—
  - (a) Ugradaṇḍa, the destroyer of the city of Rāṇarasika.
  - (b) Vishnuvardhana 'made muddy the waters of the Malaprabhāriṇī.'
  - (c) Jaitugi I 'performed a human sacrifice by immolating a victim in the shape of the fierce Rudra.'
  - (d) Jayasimha II 'subdued the mighty Chola, the lord of the five Drāvilas.'
  - (e) The 'wicked' Chola penetrated into the Belvola country, but eventually yielded his head to Someśvara I.
  - (f) The history of the Western Gaṅgas starts with Sripurusha-Muttarasa and Sivamāra.

## FOURTH PAPER

*The questions are of equal value.*

*THREE questions are to be attempted from each half*

## FIRST HALF

**Examiner—MR. HARANCHANDRA CHAKRADAR, M.A.**

1. Discuss fully how far the Indo-Aryans were acquainted with the ocean in the Vedic age. How would you identify the 'four seas' (catvāṣamudrāḥ) mentioned in the R̥gveda?

2. Locate the following tribes of the Vedic age:—

*Bharata, Kikata, Yadu, Sanjaya, and Pani.*

3. Discuss the Purāṇic conception of the earth.

4. Describe the Kāliṅga country, indicating the extent of its empire and its chief centres of political activity at different periods.

5. Draw a sketch map of India, locating on it the territories of the principal Kṣatriya tribes that participated in the great Kuru-Pāṇḍava War.

## SECOND HALF

*Examiner—DR. P. C. BAGCHI, M.A., D.LITT.*

6. Discuss the routes followed by the Yue-chi and the Scythians in their journey to India from the lands of their origin.

7. Describe the extent of Samudragupta's empire and identify the countries that lay on its frontier.

8. Give in its bare outline the geography of trans-Gangetic India from the data supplied by Greek and Chinese writers.

9. Describe the routes that connected India with the Far Eastern countries.

10. Write geographical notes on the following:—

*Barbaricum, Tamalites, Wu-chang, Po-li-ye-to-lo, and Sākala.*

## (GROUP A)

## (ARCHÆOLOGY.)

## FIFTH PAPER

*Examiners—* { *PROF. D. R. BHANDARKAR, M.A., PH.D.*  
                           { *DR. N. P. CHAKRABARTI, M.A., PH.D.*

*The figures in the margin indicate full marks.*

*Attempt THREE questions from each group including Question 1*

## GROUP A

1. Translate four of the following extracts into English, adding critical and explanatory notes where necessary:— 20

(a) Ta aja Devānampriyasa Priyadasino rāṣo dhamma-charaṇena bheri-ghoso aho dhamma-ghoso vimāna-darsaṇā cha basti-dasaṇā cha agikhamdhāni cha añāni cha divyāni rūpāni dasayitpā jenaṃ.

(b) Bahakā cha etāya athā vyāpatā dhamma-mahā-mātā cha ithijhakha-mahāmātā cha vachabhūmikā cha aṇe cha nikāya ayaṃ cha etasa phala ya ātpa-pāsaṃhā vaḍhi cha hoti dhammasa cha dipaṇā.

(c) Athā hi pajara viyatāye dhātiye nisajitu asvathe hoti viyata dhāti chaghati me pajara sukham palihāṇe hevaṃ mama lajāka kaṭṭa jānapadassa hita-sukhāye.

(d) Sarvata vijite mama yutā cha rājūke cha prādesike cha paṇḍasaṃ paṇḍasaṃ vāsesu anusaṃyānam niyātu etāyeva etāya imāya dhammanusaṃsatiya yathā añāya pi kaṇḍāya.

(e) Yatra Añtiyoko nama Yona raja param cha tena Atiyokena chature 4 rajani Turamaye nama Añtikini nama Meka nama Alikasu dero nama nicha Choḍa-Pañḍa aya Tamhapañpiya.

(f) Iyañ cha savane vivuthena duve sapañña lāṭisatā vivuthā ti 200 506 ima cha aṭhañ pavatesu likhāpayāthā yata vā aṭhi hetā silāthambhā tata pi likhāpayatha ti.

2. Give a resumé of the measures that Aśoka devised and followed for the promotion of Dhamma up to the twenty-seventh year after his anointment. 15

3. 'His (Aśoka's) edicts clearly show that there were certain well-defined grades in the influence which he claimed to exercise in different regions.' 15

Show from the edicts how far the above remark is justified.

4. Bring out clearly the importance of Bhābrū edict with regard to the history of Buddhism and its literature. 15

5. Show from the edicts what you learn about (i) the structure of society in Asoka's time and (ii) Asoka's toleration of religions other than Buddhism. 15

### GROUP B

1. (a) Transcribe in Aśokan Brāhmī two of the extracts quoted in Question 1, Group A. 15

(b) Give inscriptional evidence to prove that in the second century B.C. there was a contact between Vidiśā and the Greek kingdoms of the Punjab. 6

2. Translate two of the following and add notes, showing their historical importance and different interpretations put on them:— 16

(a) Pānañtariya-saṭhi-vasa-sate Rāja-Muriya-kāle vochchhine cha chheyāṭhi Argasi ti kañtariyañ upādiyati.

(b) Puva rāja-nivesitañ Pithudaga-dabha-nagale nekāsavati jana-pada-bhāvanāñ cha terasa-vasa-sata-Ketu-Bhadat-it-āmara-dehasaṭṭhātāñ.

(c) Ditiye chuvase achintayitā Sātakamñiñ pachhiana-disañ haya-gaja-nara-radha vahulañ-damḍam paṭhāpayati Kasa-pānañ khatiyañ cha saḥāye vitopati Musika-nagarañ.

3. (a) Discuss the history and chronology of the following inscriptions:— 8

Rājño Gopālīputrasa Bahasatimitrasa mātulena

Gopālīyā Vaihidariputrena Asāqhasenena lenañ

Kāritañ Udrākasa (?) dasame savachhara

Kaśāpiyānañ arahantānañ.....

(b) Mention the linguistic peculiarities of the extracts quoted in Question 2. 8

4. Give the extent of the Śuṅga empire and show from evidence, inscriptional or otherwise, that Pushyamitra did not enjoy his dominions unchallenged. 16

5. Write short notes on eight of the following:— 16

Tanasuliyā; Rāṭhika-Bhojake; Naṁda-rajā; Nabhaka-Nabha-paṁtishu; Satiyaputo; silā-vigaḍabhi; Samāja; anusaṛyāna; apāsinaṇe; Pushyamitrasya shashṭhena; Samāpā and Goradhagiri.



## (GROUP A)

## (ARCHÆOLOGY.)

## SIXTH PAPER

*The questions are of equal value.*

*Candidates should give their answers in their own words*

## FIRST HALF

**Examiner—PROF. D. R. BHANDARKAR, M.A., PH.D.**

*Only THREE questions are to be attempted, the last one, No. 5 being compulsory*

1. Who are the personages mentioned in the various Nānāghāṭ inscriptions? Identify them and write a note, discussing when they flourished and what their relations were with their contemporaries.
2. What evidence is usually adduced to determine the date of Nahapāna? How far is it conclusive in proving that the reign of that ruler came to an end soon after the first quarter of the second century A.D.?
3. Discuss fully the relations of the Satrap families of the Deccan and Gujerāt with the contemporary Scythian rulers of Northern India.
4. Do you accept the view that there were several Śaka eras current during the ascendancy of the Indo-Scythians? Who founded the Śaka era which is current to-day?
5. (a) Comment on the following extracts:  
 (i) [Saṃvatsa]raye āṭhasatimaṣ 20 20 20 10 4 4 maharayasa mahaptasa [Mo]gasa Pa(nemasa) masasa divase paṃchame.  
 (ii) Eta cha sarva śrāvita nigamasabhāya nibadha cha phalakavāre charitratoti.  
 (iii) Rājño Chashtansa Yāmoṭikaputrasa rājño Rudradāmasa Jayadāmaputrasa varshe dvipanchāśe 50 2.  
 (b) Write the passage (i) above in its original characters.

## SECOND HALF

**Examiner—PROF. ALTEKAR.**

*N.B.—THREE questions only are to be attempted, the last one, No. 5, being compulsory.*

1. Discuss fully the reliability or otherwise of the belief that Samudragupta's immediate successor was Chandragupta II.
2. What are the historical problems raised by the Bhitari seal of Kumāragupta II? How do you solve them in the light of other historical and epigraphical evidence?
3. Briefly point out the historical importance of the Dāmodarpar copper-plate grants.
4. Comment on the following passages:—  
 (a) Dvīvaputra-Shāhi-Shāhānushāhi-Śaka-Murundaish.  
 (b) Mālava-gaṇa-sthiti.  
 (c) Narapatibhujagānām mānadarpotphaṇānām pratikritigarudājña[m] nirviśi[m] chāvakartā.  
 (d) Tasya putrah Prithivīsheṇo Mahārājādhirāja-śrī-Kumāraguptasya mantri kumārāmātyo'nantaram cha mahābalādhipritaḥ.

5. (a) What are the principal varieties of the Gupta alphabet? In what respects do they differ from one another?

(b) Write passages (c) and (d) in Question No. 4 above in their original characters.

(GROUP A)

(ARCHÆOLOGY.)

SEVENTH PAPER

(NUMISMATICS.)

*The questions are of equal value.*

FIRST HALF

*Examiner—MR. JITENDRANATH BANERJEE, M.A.*

*Only THREE questions are to be attempted*

1. (a) Discuss the important numismatic peculiarities of the old indigenous copper coins (other than punch-marked) hailing from Avanti and Taxila.

(b) What are the principal features of the coins of the Odumbaras? Have you anything to remark about Cunningham's account of these in his *Coins of Ancient India*?

2. 'Any attempt finally to arrange the kings (Indo-Bactrian) in dynastic lists by means of the types and legends which they use is destined to failure.' (Gardner.) Do you agree?

3. (a) Discuss thoroughly the numismatic data which helped scholars to fix the sequence of succession and chronology of the early Indo-Scythic rulers.

(b) Did the Indo-Scythic and Indo-Parthian rulers issue any gold coins?

4. (a) In what different ways has the weight standard of the gold coins of the early Kushanas been accounted for? Which, according to you, seems to be the most satisfactory account?

(b) What conclusions, if any, can be drawn from a comparative study of some typical copper coins issued by Wema Kadphises on the one hand and the 'Nameless King' on the other?

5. Write what you know about any four of the following :—

(a) Sophytes' Coins.

(b) Joint issues of Strato and Agathokleia.

(c) The Strategos Aspavarma.

(d) Billon coins of Gondophares, with the name Sasas.

(e) Coins bearing the name and titles of both Hermaios and Kujula Kadphises.

(f) Coins of Kadaphes.

SECOND HALF

*Examiner—MR. K. N. DIKSHIT, M.A.*

*Only THREE questions need be attempted from this half*

1. (a) Discuss the evidence afforded by the Andhra and Western Kshatrapa coins as to the prevalence of Prakrit.

(b) What conclusions can be drawn regarding the order of succession of the Western Kshatrapas from their coins?

2. (a) Classify the coins of the Andhras found in Andhradeśa according to fabric, and discuss whether the variations are local or personal.

(b) Illustrate the significance of the titles Kshatrapa and Mahā-kshatrapa as found on the coins of the Western Kshatrapas.

3. 'The gradual disappearance of meaningless elements is clearly a guide to the chronological arrangement of the specimens of each type.' Explain this with reference to Gupta and Kshatrapa coins.

4. (a) Can you explain the relative frequency of the gold, silver, and copper issues of the Guptas?

(b) In which types of Gupta coins can you correlate the legends with the figures?

5. Write descriptive and explanatory notes on:—

- (1) Chutukaḍānanda coins.
- (2) Ujjain symbol.
- (3) Coins of Jivadāman.
- (4) Pratāpa type of Kumāragupta.
- (5) King and Lakshmi type of Skandagupta.

### (GROUP A)

### (ARCHÆOLOGY.)

### EIGHTH PAPER

*The figures in the margin indicate full marks.*

### FIRST HALF

Examiners— { PROF. D. R. BHANDARKAR, M.A., PH.D.  
MR. K. N. DIKSHIT, M.A.

Write an essay on any one of the following subjects:—

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- (1) Antiquity of Coinage in India.
- (2) Foreign influence on Ancient Indian Coinage.

### SECOND HALF

Examiners— { PROF. D. R. BHANDARKAR, M.A., PH.D.  
MR. J. N. BANERJEE, M.A.

### (NUMISMATICS)

1. Describe any six of the types of coins reproduced on the attached plate, and add your remarks on each:—

50





## (GROUP A) (1)

## (FINE ARTS.)

*The questions are of equal value.*

*Not more than THREE questions to be attempted from each half*

## FIRST HALF

*Examiner—DR. H. C. RAYCHAUDHURI, M.A., PH.D.*

1. 'Early Indian art generally is realistic.' Elucidate.
2. To what extent can the art of Gandhāra be characterised as Hellenistic?
3. Point out the general characteristics of Gupta sculpture. Examine in this connection the statement that the Buddha figure in the early Gupta period 'exhibits a peculiarity rather common in the Gupta period, that of webbed fingers.'
4. 'The Kailāsanātha is decorated with some of the boldest and finest sculpture compositions to be found in India.' Indicate the salient features of these compositions.
5. Describe the frescoes at Elūrā. How does the Elūrā style compare with that of Ajanṭā?

## SECOND HALF

*Examiner—DR. KALIDAS NAG, M.A., D.LITT.*

1. Write a note on the contribution of the *Pallavas* to the plastic art of India.
2. What part did the *Rāmāyaṇa* play in the history of sculpture of India and of Greater India?
3. Discuss in broad outlines the characteristics—  
     *either,*  
     of (a) the South Indian Bronzes,  
     *or,*  
     of (b) the Buddhist Paintings of Central Asia.
4. What do you mean by the expression 'Indonesian Art' and how does it stand with regard to the general evolution of Indian Art?
5. Write an essay—  
     *either,*  
     on (a) the Art of the Pāla period,  
     *or,*  
     on (b) the Indian Applied Arts and Crafts.

## (GROUP A) (1)

## (FINE ARTS.)

## SIXTH PAPER

## (ICONOGRAPHY)

*The questions are of equal value.*

## FIRST HALF

*Examiner—MR. JITENDRANATH BANERJEE, M.A.*

*Only THREE questions are to be attempted*

1. Write what you know about the probable causes that contributed to the growth of iconoplastic art in India.

2. What do you understand by the term *mudrā* in relation to Indian iconography? Name and describe six such as are commonly to be met with in ancient and early mediæval Indian sculptures. Discuss, in this connection, the correct significance of each.

3. Write intelligent descriptive notes on the iconography of the following:—

- (a) *Bhīṣa Linga* (Banerjee and Rao);
- (b) Deogarh *Bhogaśayanamurti* (Rao) of Viṣṇu;
- (c) Deogarh *Jñāna-dakṣiṇāmurti* (Rao) of Śiva.

4. 'The study of Devī icons confirms the view that the characteristics of the Devī as an independent goddess and her Purāṇic associations may be noticed to have somewhat marked relations to the cult of Śiva worship.' Elucidate.

5. In what manner has the *Trimurti* been represented in Brāhmanical art? In what other way can the 'celebrated *Trimurti*' of the Elephanta cave be identified?

Which identification is correct according to you? Give reasons for your answer.

## SECOND HALF

*Examiner*—MR. N. K. BHATTASHALI, M.A.

*Answer Question 3 and any two of the remaining four*

1. Give an idea of the Mahāyāna Buddhist pantheon and the gradation of the various gods and goddesses in it.

2. Give an account of the icons of Mañju-śrī under the following heads:—

(i) Probable date of the entry of the conception into the Buddhist pantheon.

(ii) Historical character of the conception.

(iii) Particular functions of the deity.

(iv) Distinguishing features.

(v) A description of the variety called *Arapachana*.

3. Identify and describe the special features of the deities represented in the attached plates marked A, B, and C.

4. Study the image represented in the attached plate D, and write notes on the following points:—

(i) The name of the icon represented.

(ii) The origin of the type.

(iii) Its earliest representation in sculpture.

(iv) The *mahāpuruṣalakṣmaṇas* prominent on the image.

(v) The *Āsana* and the *Mudrā*.

(vi) The seven jewels.

5. Write a short essay on Hārītī with the following points:—

(i) Legends connected with her incorporation into the Buddhist pantheon and her special functions.

(ii) The principal types of her images.

(iii) Antiquity of her images.

(iv) Her representations in many lands.

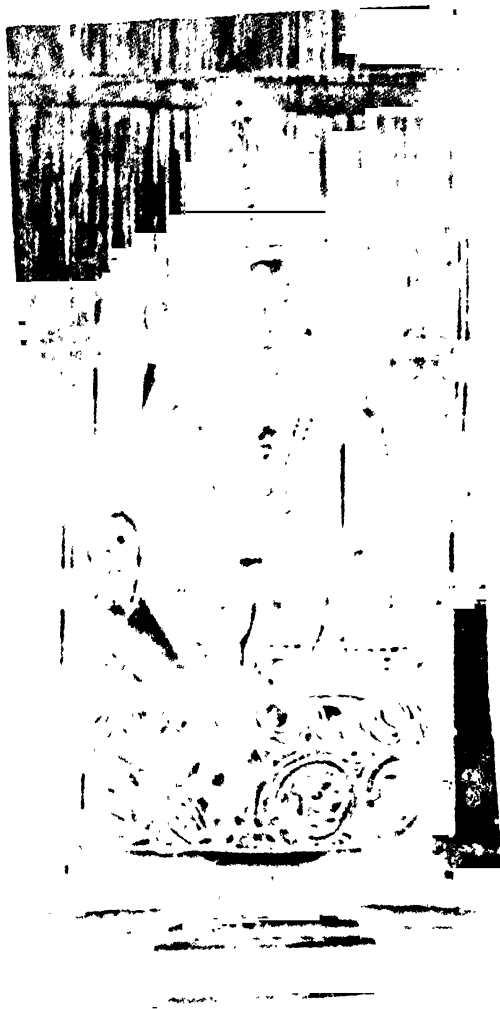


A

*To Face Page 772*







B

*To Face Page 773*

879B-31





C.

*To Face Page 772*

879B—31





*D.*

*To Face Page 772*



(GROUP A) (1)

(FINE ARTS.)

SEVENTH PAPER

(ARCHITECTURE)

*The questions are of equal value*

FIRST HALF

*Examiner—MR. K. N. DIKSHIT, M.A.**Only THREE questions need be attempted from this half*

1. In what way do you find the evolution of religious beliefs in India reflected in the architecture, and to what extent?

2. Discuss the development of the Sikhara in the Indo-Aryan or Nāgara style of architecture.

3. Describe the style of Medieval temple architecture in the Deccan and bring out its peculiarities as compared with Orissan examples.

4. Trace the development of the brick-built temples of Northern India from the Gupta period onwards and show how far they followed the models of stone temples.

5. Write what you know about the following :—

- (1) Persepolitan capital.
- (2) Nandyāvarta plan.
- (3) Kirtimukha ornament
- (4) Bamboo-line cornice.
- (5) Mithuna panel.

SECOND HALF

*Examiner—DR. STELLA KRAMRISCH, PH.D.**Only THREE questions to be attempted from this half*

1. Describe the remnants of Pāṭaliputra with regard—

- (a) to town planning.
- (b) to foreign influences in the palace of Aśoka.

2. Which are the leading types of Buddhist buildings in Gandhāra? In what way are they related to corresponding Indian types and what are their peculiarities?

3. Which of the later Gupta temples may, in certain features, be considered as prototypes of Burmese temples, such as Thatbinnnyu, etc., in Pagan? What constitutes, on the other hand, the independent Burmese character of the latter?

4. Write a note on the relation of architecture and sculpture in the temples of Orissā, from the 9th to the 13th century.

5. Trace the development of the Caitya hall with the help of structural and rock-cut examples.



## GROUP A

(FINE ARTS)

## EIGHTH PAPER

*The questions are of equal value**Attempt only THREE questions from each half*

## FIRST HALF

*Examiner*—DR. RAMESCHANDRA MAJUMDAR, M.A., PH.D.

1. 'The Amarāvati rail is probably the most remarkable monument in India.' Discuss the above, bringing out the special features of the monument.
2. Describe one typical Chaitya cave at Ajantā, emphasising the special features of this class of monument.
3. Trace the evolution of the more important types of pillars in South India from the earliest time up to the ninth century A.D.
4. Explain the chief characteristics of the Pallava style. Illustrate your answer by reference to concrete examples.
5. Describe critically, and in chronological order, the chief ancient monuments at Nasik. What do you consider to be their chief artistic merits?
6. Discuss Fergusson's views about the merit of Dravidian architecture.

## SECOND HALF

*Examiner*—DR. STELLA KRAMRISCH, PH.D.

1. Write a note on the origin and evolution of the tower of shrines and gateways in Drāviḍa temples.
2. Describe the temple buildings of Rājārājadeva Cola in Tanjore, and point out the stylistic changes that have taken place since the later Pallava period.
3. Discuss the various types of religious buildings in Poḷonnāruva and determine the part played by the Cola element.
4. Which transformation did the South Indian capital of columns, etc., undergo from the Cola period to that of the Nāyaks of Madurā.
5. Differentiate between the contemporary temples of Dhārwar and those of Mysore, and compare for this purpose the Dodḍa Basappa temple at Dambal with the Keśava temple at Somnāthpur.

## (GROUP III)

(SOCIAL AND CONSTITUTIONAL HISTORY)

## FIFTH PAPER

*The questions are of equal value**Attempt only THREE questions from each half*

## FIRST HALF

*Examiner*—DR. R. SHAMA SASTRI, B.A., PH.D.

1. Elucidate how the elastic social divisions of the Vedic and Buddhistic periods developed into rigid castes in post-Buddhist India.

2. Give a brief account of the origin and position of slaves in ancient India.

3. (a) Explain the restriction on marriage based upon Sapiṇḍa or agnate blood-relationship.

(b) Substantiate that widow-marriage, prevalent in Vedic and Buddhistic India, was discontinued in Epic India.

4. Elucidate the difference between Aryan and Dravidian cultures.

5. Give an account of the various methods of the disposal of the dead in ancient India.

## SECOND HALF

*Examiner*—MR. HARANCHANDRA CHAKLADAR, M.A.

1. Discuss some of the principles and ideals that guided the evolution of social institutions in ancient India.

2. Discuss the position of the courtesan (gaṇikā) in ancient Indian society, as revealed by Brahmanical and Buddhist literatures.

3. Can you point out any agreement between the domestic rites of the Indo-Aryans and those of any other branch of the Indo-European race?

4. Write full notes on any five of the following:—

Simantonnayana, Vratyastoma, Guhya-nāman, Saptapadi, Chaturthikarman, Agnihotra, Śrāvana-karma.

5. Describe the relations between parents and children in ancient India. Do you notice any difference with the state of things in modern Europe?

## (GROUP III)

### (SOCIAL AND CONSTITUTIONAL HISTORY)

#### SIXTH PAPER

*Only THREE questions are to be answered from each half*

*The questions are of equal value*

#### FIRST HALF

*Examiner*—MR. NARAYANCHANDRA BANERJEE, M.A.

1. Sketch the economic condition of ancient India either in the Vedic age or as described in the Jātakas.

2. What were the measures adopted by the Kauṭilyian State to solve the 'poverty problem?' Compare these with the measures taken by modern States.

3. 'The Kauṭilyian State attempted to render the maximum amount of social service though ruled by an almost irresponsible monarch.' Explain.

4. Give a short history of the foreign trade of India from the third century B.C. to the third century A.D. with special reference to—

(a) the Indian mercantile marine.

(b) important Indian sea-ports.

(c) the chief articles of export.

5. Discuss the influence of guilds on Indian—

(a) industrial development.

(b) growth of town life.

6. Discuss the part played by the village community in the socio-economic life of India.

## SECOND HALF

*Examiner*—DR. H. C. RAY, M.A., PH.D.

1. Write a note on the main features of agrarian system of Hindu India. Quote authorities in support of your statements.
2. 'In trying to show points of affinity between the environment of Kautilya and that of the Kameralists he expresses the opinion that these writers were studying the maxims of war-economy.' Discuss this statement.
3. 'Hippalus was the pilot who, by observing the location of the ports and the conditions of the sea, first discovered how to lay his course straight across the ocean.' Explain this passage with special reference to Indo-Roman trade in the first century A.D.
4. Write a brief note on the corporate activities in economic life of the ancient Indians.
5. Give an account of labour in ancient India. Did the State take any active steps to improve the conditions of slave labour?

## (GROUP III)

## (SOCIAL AND CONSTITUTIONAL HISTORY)

## SEVENTH PAPER

*The questions are of equal value*

*Candidates are to answer only SIX questions THREE from each half*

## FIRST HALF

*Examiner*—DR. H. C. RAYCHAUDHURI, M.A., PH.D.

1. Give a picture of Indian political life of the Vedic period and mention the principal characteristics that distinguished it from that of the Epic period.
2. What was the relation of religion to politics in ancient India? Did the theocratic ideal ever gain ground in the country?
3. Discuss the constitutional position of the Hindu king according to the *Arthashastra*. What were the restrictions upon his power?
4. Describe the methods of warfare as depicted in the *Kautiliya*, with special reference to—
  - (a) the establishment of military camps.
  - (b) divisions of the army, and
  - (c) siege operations.
5. Write critical notes on—
  - (a) the political constitution of the Licchavis of Vaisali
  - (b) the Government officials of the Maurya period,
 and (c) the department of law and order as sketched in the *Kautiliya*.

## SECOND HALF

*Examiner*—MR. NARAYANCHANDRA BANERJEE, M.A.

6. What was the ideal of the State in Hindu India? Discuss the rival views and summarize the different theories about the origin of the State.

7. Explain Sāḍgunya, and show that the different aspects of interstate relation comprised in it are found in the relations of the States in modern times.

8. Estimate the amount of care to be taken by the ideal Hindu king in the welfare of his subjects, with special reference to the following:—

(a) the relief of the poor,

(b) the amelioration of the condition of the labouring classes,

(c) grants to education,

and (d) the prevention of adulteration of food-stuffs.

9. Was Kauṭilya a believer in the policy of aggression? Discuss his position with special reference to the passage 'sandhi-vigrahaḥayoḥ tulyāyām vṛddhau sandhim upeyāt.'

10. Enumerate the chief sources—Sanskrit texts, accounts of foreigners, etc.,—that should be utilized for giving a sketch of the machinery of administration in ancient India.

### (GROUP III)

#### (SOCIAL AND CONSTITUTIONAL HISTORY)

#### EIGHTH PAPER

*The questions are of equal value*

*Attempt only THREE questions from each half*

#### FIRST HALF

*Examiner*—MR. HARANCHANDRA CHAKLADAR, M.A.

1. Write an essay on the Pre-Dravidian element in the Indian population.

2. Describe the Negrito population living at present in the Indian Empire. Are there any evidences of their existence in Eastern or Southern India?

3. Discuss the racial ethnology of the people speaking the Bengali language. With what peoples outside India do they show any physical affinity?

4. Attempt a systematic classification of the yellow-skinned people of Asia and show which of the varieties are found in India.

5. Write notes on the ethnic character of any five of the following:—

Kalmuk, Batak, Basque, Bell-beaker folk, Bushmen, Prospectors, Maya people, Eskimo.

#### SECOND HALF

*Examiner*—RAI BAHADUR SARATCHANDRA RAY, M.A.

1. Discuss the relation of folklore to ethnology.

2. Locate on a map of India and describe the various racial types found in the country. Criticise Risley's classification of Indian racial types.

3. Write a short history of the caste system of India and discuss the various theories of its origin and development.

4. Does promiscuity in sexual relations occur anywhere in the world? Have you any evidence, literary or otherwise, of the existence of promiscuity in ancient India?

5. Discuss the origin, development, and effect of Hypergamy, Polyandry, and Polygyny in India. Give instances of such customs among the present population of India.

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(GROUP D)

FIFTH PAPER

Examiners— { MR. HARANCHANDRA CHAKLADAR, M.A.  
                  { MR. NARENDRAKUMAR MAJUMDAR, M.A.

(INDIAN ASTRONOMY AND MATHEMATICS)

*Candidates are permitted to attempt not more than six questions*

*The questions are of equal value*

1. Give the different approximations to the square root of 2, as given in the various Sulba Sūtras.

Estimate the degree of approximation of the expression given by Āpastamba and Baudhāyana for the square root of 2. Explain geometrically how this expression may be evolved.

2. Explain the rules for squaring the circle and circling the square, as found in the Sulba Sūtras. Compare and contrast with later approximations, and trace the history up to the time of Bhāskarāchāryya.

3. Give three different methods for the construction of the Darśa-paurṇamāsikī Vēdī according to Mānava Śulba Sūtram. Comment on any peculiarity you notice in any of these methods.

4. Explain Āpastamba's general rule for the increase in the area of a square when the side is increased. Illustrate by examples from Sulba Sūtras.

5. Construct the "sāratnīprādesa-saptavidha-agni" according to Āpastamba. What inference do you draw from the prescription of different arrangements of bricks in the consecutive layers?

6. Construct the "vakra-pakṣa-vyasta-puccha śyenacit" according to Baudhāyana.

7. Write a short note on the bricks employed in the construction of Agnis in the Sulba Sūtras. What inferences do you draw about the architecture of the time?

8. Describe the construction of the "kaṅka-cit" according to Baudhāyana.

9. Give the construction of the "sāra-ratha-cakra-cit" according to Baudhāyana and explain its importance in the history of Indian geometry.

10. Give a construction of the "parimaṇḍala kūrmacit" and compare with that of "parimaṇḍala droṇacit."

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## (GROUP D)

## SIXTH PAPER

## (ASTRONOMY)

*The questions are of equal value*

*Candidates are permitted to attempt FOUR questions from EACH half*

## FIRST HALF

*Examiner—DR. B. B. DUTT, D.Sc.*

1. Explain in detail Āryabhaṭa's scheme of alphabetic notation, and illustrate it by explaining the meaning of चयगयिदुशुल्ल and of दुड्विव. Give also the Greek alphabet notation. Compare the two systems on the following points: (a) the mode of expressing higher orders of numerals, and (b) use in practical calculations.

2. Find the Indian sines of  $30^\circ$ ,  $60^\circ$ ,  $15^\circ$ ,  $75^\circ$ , and  $7^\circ 30'$  for a radius of 7,200 units by Āryabhaṭa's method.

3. Give Āryabhaṭa's rule for finding the volume of a sphere pointing out the amount of error in it. Who was the first Indian mathematician to give the correct rule? Can you cite any evidence that even up to the time of Prithūdaka (864 A.D.), the wrong rule of Āryabhaṭa was taken as correct? Explain Bhāskara's method of finding the volume of a sphere.

4. Trace the history of the use of a symbol for zero and the decimal notation in Indian literature, both mathematical and non-mathematical, from the earliest times up to the time of Āryabhaṭa. What is the date of the earliest epigraphic use of this system? Why was this notation so late in adoption in Indian epigraphy?

5. For a circle of radius 10,000, find, after Āryabhaṭa, the perimeter of an inscribed regular dodecagon. Compare the values of  $\pi$  that you get from the dodecagon with that from the hexagon.

6. Give both internal and external evidences to prove that section Gaṇita is an integral part of the Āryabhaṭīyam.

## SECOND HALF

*Examiner—MR. PRABODHCHANDRA SENGUPTA, M.A.*

1. Trace fully the development from Brahmagupta to Gaṇeśa of the following arithmetical operations:—

Addition, Subtraction, Multiplication, squaring and finding the Square and Cube roots.

Do you consider Gaṇeśa's method of multiplication in any way superior to the methods of Brahmagupta and Sridhara?

2. Give an account, with methods of derivation, of the rules for constructing rational right-angled triangles from Brahmagupta and Bhāskara.

3. Enunciate, after Bhāskara, the "cyclic rule" for the solution of the equation  $Nx^2 + 1 = y^2$ . Explain how this was an easy deduction from Brahmagupta's Vajrabhadra rule.

Solve by the "cyclic rule" the equation

$$48x^2 + 1 = y^2.$$

4. State and explain Brahmagupta's rule for the diagonals of a cyclic quadrilateral and also his rule for the circum-radius of a triangle.

5. Solve separately, by using the methods of Brahmagupta and Bhāskara, the equation

$$N = 57x + 12 = 41y + 5.$$

6. Solve after Bhāskara:—

(i)  $(x+y)^2 + (x-y)^2 = 2(x^2 + y^2)$ .

(ii)  $6x^2 + 2x = y^2$ .

7. State, illustrate, and explain *Caturveda's* rule for finding the sum of a series in G. P. When did he flourish?

(GROUP D)

SEVENTH PAPER

(ASTRONOMY)

*The questions are of equal value*

*Only six questions are to be attempted, out of which FOUR questions must be selected from the FIRST half and TWO from the SECOND half*

FIRST HALF

*Examiner*—MR. PRABODHCHANDRA SENGUPTA, M.A.

1. Prove that the number of risings of the asterisms, diminished by the number of the revolutions of each planet respectively, gives the number of risings of the planets in an Age.

What are intercalary months, and omitted lunar days?

2. Explain the method of determining the longitude of any place as given in the *Surya Siddhanta*.

What was the prime meridian from which longitudes were calculated by the Hindu astronomers?

3. Prove that the equation of the centre is given by the following formula:—

$$\sin V_0 = \frac{3438 \times \frac{C_m \sin k}{21600}}{\sqrt{\left\{ \left( \frac{C_m \sin k}{21600} \right)^2 + \left( 3438 + \frac{C_m \cos k}{21600} \right)^2 \right\}}}$$

where  $k$  is the *kendra* and  $C_m$  the rectified *periphery*.

4. Explain the method of finding the ascensional difference of any planet as given in the following verse:—

Multiply the sine of declination by the equinoctial shadow, and divide by twelve: the result is the earth-sine; this, multiplied by radius and divided by the day-radius, gives the sine of the ascensional difference.

5. Give the methods of determining the hypotenuse of the east and west shadow cast by the sun at the moment when it is upon the prime vertical.

6. Write a short note on the planetary theory of the Hindu astronomers and discuss the nature of the fundamental elements upon which the astronomical system of the Hindus is founded.

SECOND HALF

*Examiner*—PANDIT BABUA MISRA.

1. किं नाम युग्मं ? को नाम कल्पः ? यज्ञाद्यानयने किमनयोः प्रयोजनम् ? युगसम्बन्धिनां कल्पसम्बन्धिनां वा यज्ञभगवानां कथमवगतिर्भवितुमर्हतीति वीपपत्तिर्वा व्याख्येयम् ।

2. को नामाङ्गकः ? स च सूर्यसिद्धान्तराया कथमानौयने ? किं च तत्प्रयोजनमिति सपरिष्कारं प्रदर्शनीयम् ।
3. खल्वक्त्यामखली खल्वगत्या सर्वदेव पूर्वाभिमुखं गच्छतां यज्ञाणां वक्ता गतिः का नाम ? सा च सूर्यसिद्धान्ताक्ता कथमुपपद्यते ? का वा तव युक्तिरिति स्फुटं लिख्यताम् ।
4. 'तद्यनञ्चयोगः' के नाम ? एषामानयनं सूर्यसिद्धान्ताक्ता कथं भवतौखल्य रीतिरूपपत्तिश्च लिख्यताम् ।
5. लब्धांशानामक्षांशानां च ज्ञानं सूर्यसिद्धान्ताक्ता कथा रीत्या भवितुमर्हति ? तथोक्तानि ह्यायादर्शनेन रवे राश्यादिभागः कथमानौयने ? उपपादनीयोऽयं विषयः ।
6. चन्द्रसूर्यग्रहणयोः को हेतुः ? सूर्यसिद्धान्ताक्ता तत्परिमाणं समयादिकं च कथमवगम्यते ? कथं तद्वर्णितपन्थाः ? सर्वे सापत्तिकं विवेचनीयम् ।

## (GROUP D)

## EIGHTH PAPER

## (INDIAN ASTRONOMY AND MATHEMATICS)

*The questions are of equal value*

*Candidates are permitted to attempt not more than THREE questions from EACH half*

## FIRST HALF

*Examiner—MR. NARENDRAKUMAR MAJUMDAR, M.A.*

1. Compare and contrast the methods of division of the Ecliptic according to Vedāṅga Jyotiṣa, Sūrya-prajñapti, Āryabhaṭīyam, and modern astronomy.

What conclusions do you draw ?

2. State and explain the elements of the Vedāṅga Jyotiṣa. Do they differ from the elements of the Sūrya-prajñapti, and if so, in what ?

Comment on the rules giving the solstitial tithis and nakṣatras in a yuga of 5 years.

3. Give a short history of the introduction of Hindu-Arabic numerals with place value into Europe.

4. Write a short note on the peculiarities of the Bākshālī Mathematics.

Give the rule for approximating to the square-root of a number which is not a perfect square, and apply this rule to find approximately the square-root of 889.

5. Give and explain the rules for the determination of the eclipses according to Āryabhaṭa.

6. Explain Āryabhaṭa's theory for the determination of the true longitudes of planets. Do you find any foreign influence in this theory ?

## SECOND HALF

*Examiner—MR. PRABODHCHANDRA SENGUPTA, M.A.*

1. Give an account of the Indian pre-epicyclic astronomy as given in the Vasiṣṭha Siddhānta of the Pañca-siddhāntikā. In what relation does it stand to the Jyotiṣha Vedāṅga and Āryabhaṭa types of Indian astronomy ?



2. If the radius be 100,000, the Indian sine of  $15^\circ$  is 25,882. From this calculate the Indian sines  $7\frac{1}{2}^\circ$  and  $3\frac{1}{2}^\circ$  respectively. Trace the history of the method you employ.

3. Define the terms *Hrti*, *Antyā*, *Cheda*, *Śaṃkutala*, and *Śaṃku*, as used in Indian astronomy.

Obtain the "time altitude" equation in the Indian form and reduce it to the modern form. State evidences with dates to prove that the Hindus were the first to find this equation.

4. State Ptolemy's rule of "six quantities" and establish the following equations of his for calculating the sun's right ascension and declination :—

$$(i) R \sin \delta = \frac{R \sin l \times R \sin w}{R}$$

$$\text{and (ii) } R \sin AR = \frac{R \cos w \times R \times R \sin \delta}{R \sin w \times R \cos \delta},$$

where  $w$  is the obliquity of the ecliptic,  $l$  the sun's celestial longitude,  $\delta$  and  $AR$  his corresponding declination and right ascension.

Give the standard forms of the above equations in Indian astronomy and deduce them by its methods. What difference do you notice in the form of the second equation in the Indian and Greek systems? Which do you think is the more convenient?

5. Explain the following stanza from the *Āryabhaṭīyam* :—

अपमण्डलस्य चन्द्रः पाताद शत्रुगरेष दक्षिणतः ।

गुरुकुजकीर्णार्धेयं शीघ्रोच्चैर्नापि बुधशुक्रौ ॥

What inference do you make as to the idea of planetary motion in Indian astronomy?

6. Enunciate and explain after Bhāskara the method of finding the instantaneous daily motion of a planet affected by the inequality of conjunction. Trace the history of the solution of this problem from Brahmagupta to Bhāskara.

## MENTAL AND MORAL PHILOSOPHY

### FIRST PAPER

#### (HISTORY OF ANCIENT AND MEDIAEVAL EUROPEAN PHILOSOPHY)

*The questions are of equal value*

### FIRST HALF

*Examiner*—MR. K. C. MUKHERJEE, M.A.

*Candidates are recommended to attempt only THREE questions.*

1. 'Anaxagoras argued from the genesis of unlikes from each other that they were already in each other.' (*Physics*).

Do you think Anaxagoras' position is philosophically sound?

2. 'There is a third kind of madness, which is a possession of the Muses; this enters into a delicate and virgin soul, and there inspiring frenzy awakens lyric and all other numbers.' (*Plato*).

Discuss the Platonic (or Socratic?) doctrine of 'inspired madness.'

3. Do you attach any philosophical importance to the distinction made by Aristotle between what he calls 'coming to be' and 'alteration'?

4. 'If we only imagine the God of Aristotle in a sort of refraction of himself, or simply inclining toward the world, at once the Platonic Ideas are seen to pour themselves out of him, as if they were involved in the unity of his essence.' Examine this view.

5. 'The final cause produces motion by being loved, and by that which it moves, it moves all other things.' (*Aristotle*.) Discuss.

6. 'The Good is gentle and friendly and tender, and we have it present when we but will. Beauty is all violence and stupefaction; its pleasure is spoiled with pain, and it even draws the thoughtless away from the Good as some attraction will lure the child from the father's side.'  
(*Plotinus*).

Examine the validity of the distinction Plotinus makes between the Good and the Beautiful.

7. 'The ceaseless forward movement of Life brings with it unending Time.'

'Eternity is Life in repose, unchanging, self-identical, always endlessly complete.' (*Plotinus*).

Is it possible to distinguish Time from Eternity?

8. Do you think the philosophy of Thomas Aquinas is a force in contemporary thought?

9. Examine the spiritual ideal of St. Augustine as set forth in 'The City of God.'

## SECOND HALF

(PLATO AND PLATO'S 'REPUBLIC'.)

Examiner—MR. J. R. BANERJEA, M.A.

N.B.—Answer ANY THREE questions.

1. In what respects is Plato's philosophy an extension of, and an advance on, Socratic philosophy? Fully discuss this question.

2. What are Ideas in the Platonic sense? What are their characteristics? Explain the three different ways in which he defines his Idea of the Good. What is the relation of this Idea to God?

Or,

What are the proofs of the immortality of the soul according to Plato? Examine them. Did he believe in the doctrine of Transmigration of souls?

3. What qualities must the Guardians possess according to Plato in the *Republic*? What are the characteristics of the true philosophic disposition according to him, as stated in the *Republic*? How does he establish there that the affairs of men will never be perfectly ordered unless philosophers be kings, or kings philosophers? Examine this view of Plato.

4. Trace, after Plato in the *Republic*, the origin and describe the character of the four inferior types of men and States.

Or,

Discuss, after Plato in the *Republic*, the organic idea of the State and explain, in detail, all the implications of his opposition to Individualism. How far is his position tenable?

5. 'Hence, if this be true, we cannot avoid adopting the belief, that the real nature of education is at variance with the account given of it by certain of its professors, who pretend.....to infuse into the mind a knowledge of which it was destitute.' Fully develop the thoughts embodied in this extract from the *Republic* and examine them.

## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

**Examiner—MR. A. C. DAS, M.A.**

*Candidates are to answer ANY THREE of the following questions.*

1. Give a critical account of Descartes' psychology, and show how he anticipated some school of psychology, of modern times, with some limitations.

*Or,*

How does Descartes' view of the relation between mind and body interfere with his ethical view of life? Fully discuss the problem.

2. Critically examine, with historical references, Spinoza's theory of attributes.

*Or,*

Give an account of Spinoza's theory of knowledge, and show its affinity with that of Leibnitz, if there be any.

3. 'Locke's philosophy is nothing but "*Cartesianism*," built on an empirical foundation.' Fully discuss.

*Or,*

Show how Locke anticipated Kant in his philosophical outlook, and show also in what way he differed from him.

4. 'Locke, by his empirical attitude, paved the path to Hume's scepticism.' How do you justify this statement?

5. '*Esse est percipi*.' Critically discuss this and show if Berkeley is justified in his passage from human consciousness to Divine consciousness, on the strength of the principle.

6. Do you find, in any way, in Leibnitz the Kantian distinction between the world of noumena and that of phenomena? Fully bring out the affinity and the difference, in the outlook of both the thinkers, on the point.

## SECOND HALF

**Examiner—DR. H. L. HALDAR, M.A., PH.D.**

1. 'The whole difficulty of Kant arises from his attempt to build his theory which virtually overcomes dualism upon a basis of dualism.' Elaborate and examine this view.

*Or,*

Compare Kant's conception of nature with that of common sense dualism and give a critical estimate of it.

2. Give a critical account of Kant's theory of the good will.

*Or,*

Explain and examine Kant's view of the Beautiful.

3. Explain, as clearly as you can, Hegel's conception of the relation between mind and the world.

*Or,*

Compare Kant's view of the categories with that of Hegel.

## THIRD PAPER

*The questions are of equal value*

## FIRST HALF

**Examiner—DR. A. N. MUKHERJEE, M.A., PH.D.****N.B.—Attempt ANY THREE questions.**

1. Explain the Buddha doctrine of Impermanence, and compare it with the views of Heraclitus and Bergson.
2. Explain the view of the external world as held by the Yogachāra school of Buddhism and compare it with that of Sāṅkara.
3. Consider how far the conceptions of the Puruṣa and the Prakṛti of the Sāṅkhya are respectively reducible to those of the Ātmā and the Māyā of the Vedānta.
4. How does the Bhagavatgītā reconcile the respective claims of Karma, Jñāna, and Bhakti? Compare the Bhaktiyoga of the Gītā with Spinoza's intellectual love of God.
5. Explain how the need for Release (*Moksha*) arises in Indian Philosophy. How is it conceived by the different systems of Indian Thought?
6. Examine critically how far the Sāṅkara Vedānta is open to the following charges:—

(1) Irreligion, (2) indifference to moral distinctions, and (3) solipsism.

## SECOND HALF

**Examiner—MR. S. C. CHATTERJEE, M.A.****Answer ANY THREE questions.**

1. What is the nature of perception as a method of knowledge (*pramāṇa*)? Explain and examine the distinction between external and internal (*bāhya* and *mānasa*), ordinary and extraordinary (*laukika* and *alaukika*) perceptions.
2. Explain testimony (*śabda*) as a source of knowledge and consider the question of its independence from the standpoint of Western philosophy.
3. Briefly explain and illustrate the Vaiśeṣika categories of reality (*padārtha*).
4. Compare and criticise the position of the Sāṅkhya and Yoga systems with regard to the existence and attributes of God.
5. What are the points at issue between Sāṅkara and Rāmānuja with regard to the doctrine of Māyā as an explanatory principle of the phenomenal world? Give your own estimate of their positions with reference to parallel views from Western philosophy.

## FOURTH PAPER

*The questions are of equal value*

## FIRST HALF

**Examiner—RAI BAHADUR K. C. BHATTACHARYA, M.A.****Answer ANY THREE questions.**

1. The subject as the knower or the knowing act cannot be known at least in the sense in which the object is known. Examine the view.

2. How is *meaning* as the content of thought related to *fact* as the content of belief?
3. The logical universal is a timeless fact and not a mere meaning. Discuss the statement.
4. Relation presupposes facts to be related but a fact is constituted by its relations. Discuss the puzzle.
5. Present in a connected form the different senses in which the word *intuition* is used in epistemology.

## SECOND HALF

*Examiner*—DR. S. K. DAS, M.A., PH.D.

*Answer ANY THREE questions.*

1. 'I do not deny that reality is an object of thought; I deny that it is barely and *merely* so.' Expound clearly the view set forth here, and indicate what appears to you to be the most cogent view regarding the relation between Thought and Reality.
2. How would you justify the contention that 'the whole notion of correspondence, however useful as a working hypothesis, breaks down if regarded as an adequate conception of truth'? Wherein consists, after all, the strength of the correspondence-notion?
3. Discuss fully the virtues as well as the extravagances of the Pragmatist theory of truth with specific reference to the question of workability or practical efficiency (*arthakriyākāritvam*) recognised as a test of truth in the different schools of philosophical thought, Western as well as Eastern.
4. 'Truth in its essential nature is that systematic coherence which is the character of a significant whole.' Discuss this theory of truth, and examine its importance from the standpoint of the *Śvataḥprāmāṇyavāda*.
5. Institute a critical comparison between the leading theories of Error in European as well as Indian philosophy, and expound the view that affords a satisfactory explanation of error.

## FIFTH PAPER

(THEORY OF KNOWLEDGE AND METAPHYSICS)

*The questions are of equal value*

*Attempt THREE questions from EACH half.*

## FIRST HALF

*Examiner*—MR. ANUKULCHANDRA MUKHERJEE, M.A.

1. 'Reality is a single and unalterable system of relations.  
'Reality is a single supra-relational experience.'  
Indicate briefly the considerations which lend support to these apparently conflicting conceptions of the real. Are they reconcilable?
2. It has been emphatically held that though there is time in the Absolute, yet the Absolute is not in time. Discuss this position in the light of the doctrine of reality as a never-ending process of creative evolution.
3. 'The individuals are simply pipes through which the Absolute pours itself.' Consider how far this charge can be successfully met by an absolutist, indicating at the same time your own views on the status of the individual self in the structure of the

4. State clearly the relation between Metaphysics and Psychology, and illustrate your views by distinguishing between the psychological and the metaphysical approach to the study of mind.

5. 'The common appearances of our lives—of material things of conduct and of institutions—all carry us a certain way, and to pronounce them illusory would be a foolish exaggeration.' (*Bosanquet*).

Expound this remark, showing how far it is a valid charge against the doctrine of Maya, and contrasting the status of the 'common appearances' in the Vedantic philosophy with that in Western absolutism.

## SECOND HALF

*Examiner*—MR. B. K. MALLIK, M.A., B.Sc.

1. Could you draw a distinction between modern and contemporary Philosophy? In what precise way has contemporary thought advanced the theory of Knowledge? Discuss Realism.

2. How would you place Bergson as an original philosopher? Was he consistent in his theory of Duration?

3. How would Bergson's *Elan-vital* compare with the Absolute of the Idealists? Could you detect a Dialectic in the creative evolution of Bergson?

4. Discuss the contribution of Oxford on Absolute Idealism with special reference to Green, Bradley, and Bosanquet. Do you think Oxford really made an advance on Hegel?

5. Has Russel got a philosophy which is strictly his own? Could you call him a Realist, a Behaviourist, and a Pragmatist?

## SIXTH PAPER

### (ESSAY)

*Examiner*—RAI BAHADUR K. C. BHATTACHARYYA, M.A.

Write an essay on *one* of the following subjects :—

(1) 'With Plato Philosophy exhibited an idealistic antithesis to the given actuality, an antithesis which demanded the supplement of a more realistic theory of things. This was supplied by Aristotle.'

(2) Pragmatism—its history, different types, and examination.

(3) Recent contributions to Logic and their value.

(4) The Idealism of T. H. Green.

(5) The Neo-Realistic Movement.

(6) The Samkhya system and Vedantism—their contrast and possible reconciliation.

(7) Recent Psychological Schools.

(8) The doctrine of the soul in Hindu and Buddhist philosophies.

(9) The problem of values.

(10) Mysticism—its different types and value for religion.

## (PSYCHOLOGY)

## FIRST PAPER

## (GENERAL AND PHYSIOLOGICAL PSYCHOLOGY)

*The questions are of equal value*

*Not more than THREE questions are to be attempted from EACH half.*

## FIRST HALF

*Examiner—MR. HARIDAS BHATTACHARYYA, M.A.*

1. Give a diagrammatic representation of the structure of the eye, indicating briefly the function of each of its parts in relation to vision.

2. Locate and distinguish between the sensory and the association centres of the human brain, and indicate the function of each in the elaboration of mental life.

3. Give the most plausible physiological explanation of *any four* of the following :—

Synaesthesia, negative after-image, tonal fusion, muscular fatigue, habit-formation, reflex action.

4. Describe under what physiological condition (1) two retinal images may combine to give the idea of a single object, (2) two sound sensations may produce beats, and (3) the taste of an object may be modified.

5. Discuss the value of any attempt that has been recently made to explain higher mental processes in terms of physiology.

*Or,*

Give an idea of the contribution of *any two* of the following writers to physiological psychology :—

Helmholtz, Wundt, McDougall, Watson.

## SECOND HALF

*Examiner—DR. N. N. SENGUPTA, M.A., PH.D.*

1. Compare the conception of consciousness as a *stream* (James) with that maintained by Structural Psychology.

2. Discuss the relative value of the following theories of perception : (i) perception as a product of *apperceptive function*, (ii) perception as a *Gestalt or configuration*, (iii) perception as a product of *association of sensory elements*.

3. Discuss the relative merit of the following hypotheses : (i) Memory as an act of remembrance (MacDougall); (ii) Memory as a process of reproduction of past images; (iii) Memory as a process of organisation of past experiences in terms of conation.

4. Discuss how far the structural theory of attention explains the facts of attentional consciousness.

5. Give a critical estimate of the Structural, Functional, and Behaviouristic accounts of will.

## SECOND PAPER

*The questions are of equal value*

*Only THREE questions are to be attempted from EACH half.*

## FIRST HALF

*Examiner—MR. HARIPADA MAITI, M.A.*

1. Trace briefly the origin of the Gestalt and the Behaviouristic school of Psychology.
2. Give a historical outline of the theory of Psycho-physical Parallelism.
3. Discuss the psychological problem of Perception, with special reference to the theories of James, Wundt, Stout, and Köhler.
4. Compare the Structuralist and the Functionalist standpoint. Illustrate your answer by reference to two typical representatives of the two standpoints.
5. Give an account of recent developments in the theories of the Subconscious.

## SECOND HALF

*Examiner—DR. SUHRITCHANDRA MITRA, M.A., PH.D.*

1. Discuss the fundamental differences between psychiatry and psychoanalysis.
2. How do you explain the phenomenon of Hypnosis? Discuss specially McDougall's theory of Hypnotism.
3. Write a short essay on the Interpretation of Dreams.
4. Discuss the views of Jung, Adler, and Freud on the causation of neurosis.

*Or,*

Enumerate your reasons for believing in the evolution of mind in animals. Give some concrete illustrations.

5. Indicate the relative influence of Instinct and Intelligence in animal behaviours.

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(LOGIC)

## FIRST PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner—DR. SUSILKUMAR MAITRA, M.A., PH.D.*

*Answer ANY THREE*

1. Is the form of knowledge separable from its matter? Would you accept the view that 'Logic is a formal science. . . it deals with the form, and not with the matter of knowledge'? In what sense would it be legitimate to speak of Logic as 'the science of sciences'?



2. Examine the following :—
  - (a) Judgment consists in putting two ideas together.
  - (b) Judgment consists in comparing two or more things.
3. Discuss the question whether Negation presupposes Affirmation. Does Negation affect the copula? What is meant by Double Negation? How is Double Negation related to Affirmation?
4. Analyse the following negative judgments :—
  - (a) Red is not blue.
  - (b) Lead is not elastic.
  - (c) I have not shouted.
  - (d) The fire does not burn.
  - (e) X is not going home.
5. Which is the primary meaning of a name, its denotation or its connotation? How would you express the relation between denotation and connotation, and why? Discuss the question whether Proper Names should be regarded as non-connotative.

## SECOND HALF

*Examiner*—MR. SURYYANARAYAN SASTRI.

*Answer ANY THREE questions.*

1. Explain what you consider to be the essence of Inference, with special reference to the requirement of (a) novelty. (b) three terms. What do you understand by the Paradox of Inference? Can you get over it?
2. 'Complete Enumeration has been operative as a false ideal both in the doctrine of Induction and in the doctrine of the Syllogism.' Discuss. State briefly the value, if any, of Computation.
3. Give a brief account of Bradley's criticism of (a) the Syllogism, and (b) Mill's canons of Induction.
4. 'It (Induction) is, consequently, like Comparison or Recognition, like Observation or Experiment, a transient and external characteristic of inference.' Discuss, explaining what you consider to be the relation of Induction to other inference.
5. Explain and discuss the significance of the term 'aesthetic necessity.'

## SECOND PAPER

*The questions are of equal value*

### FIRST HALF

*Examiner*—DR. P. D. SASTRI, M.A., PH.D.

*Answer ANY THREE questions.*

1. Critically inquire into the validity of the main grounds on which Bradley sets down the Inductive Logic as a *fasco*. State your own views as well.
2. Bring out the distinction on which the relation of necessity to experience is based. Examine the views of Whewell and Mill as well.
3. Clearly define the object and scope of Scientific Induction. In what sense could it be viewed as a contradiction in terms? How does it stand in relation to the verification of hypothesis?

4. Make out a case for 'reasoning directly from particulars to particulars' and criticise the position after Bradley and Bosanquet.

5. What is meant by 'Postulates of Knowledge'?

Clearly show the sense in which the Law of Contradiction is (a) a truism, (b) false, and (c) a genuine law of thought. What is the nature of Reality as revealed by the Laws of Thought?

## SECOND HALF

*Examiner*—DR. B. K. MALLIK, M.A., B.Sc.

*Attempt ANY THREE questions.*

1. What is the function of Thought? Does it classify Experience or generate it? Discuss Plato, Kant, and Hegel.

2. What is the function of the Dialectic? Does it supply a proof or constitute reality? Would you identify a philosophy with the Dialectic.

3. Is there any meaning in the phrase 'Imperative of Thought'? Do we control by thought any more than we control by choice? What are necessities of thought? Do they really produce absolute certainty?

4. How would you judge the importance of relations? Is the distinction between the External and the Internal relations at all significant?

5. Is judgment a valid and consistent fact? Does the subject of a Proposition bear a predicate or function as an event? What has happened to Predication in the light of modern work?

## (ETHICS)

### FIRST PAPER

*The questions are of equal value*

### FIRST HALF

*Examiner*—RAI K. N. MITRA, BAHADUR, M.A.

*Attempt ANY THREE*

1. Discuss Green's conception of Freedom of the Will and examine in this connection the validity of Sidgwick's criticism that it is equivalent to pure determinism.

*Or,*

What is Ethical Hedonism as distinguished from Psychological Hedonism? Can Hedonism as an ethical theory be justified on psychological grounds?

2. Discuss the question of moral values. Is there any absolute moral value? If so, how do you explain the conflict of ultimate ends?

3. 'With Kant, as with Plato, it is the requirements of morality that lead to the hypothesis of the reality of an ideal world.' Explain.

Is Kant's moral postulate incompatible with a sensible or phenomenal world?

*Or,*

Give Wundt's classification of norms. How does this classification help in determining the moral worth of motives or ends?

## SECOND HALF

*Examiner*—DR. SUSILKUMAR MAITRA, M.A., PH.D.*Answer ANY*

1. Distinguish between moral progress and moral retrogression. Discuss the view that 'while science grows, morality is stationary.'
2. What do you consider to be the chief differences between ancient and modern ethics? How would you account for these differences?
3. What are the different stages of the moral development of the individual? How is the moral development of the individual related to that of the race?
4. Discuss the question of conflict of loyalties, with special reference to the relation between a State and its citizens.
5. Is the institution of Private Property morally defensible? Discuss the question with special reference to the problem of the relation between capital and labour.

## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—DR. M. N. SARKAR, M.A., PH.D.*Answer ANY THREE questions.*

1. How do you distinguish Mechanical Causality from Psychical Causality? Indicate the bearing of this distinction on ethical problems.
2. 'Can Ethics be based upon Metaphysics?' Examine in this connection the views of Green, Wundt, and Moore.
3. Explain Kant's conception of the Moral Law, and show how it stands related to the conception of Humanity as kingdom of ends.
4. Explain Wundt's Law of Heterogony of Ends and show how it does help the evolution of the Cosmic Ends (ends of humanity) in Moral Life.
5. How is the individual related to society? Is perfection of moral life possible in complete detachment from society? Reproduce the views of Green and Wundt.

## SECOND HALF

*Examiner*—MR. N. C. GANGULI, M.A.*Answer ANY THREE questions.*

1. Point out the subject-matter of Social Philosophy. Set forth clearly its relation to Ethics and Politics.
2. Examine the nature of Society from the standpoint of its origin. Notice the Eastern and the Western views of it.
3. Explicate the significance of association in the social structure. Analyse it into its principal modes.
4. Trace the growth of marriage as an institution. Show its importance in the advance of civilization.
5. What is meant by social ideals? Make, after Mackenzie, a critical estimate of them.

## (PHILOSOPHY OF RELIGION)

## FIRST PAPER

*The questions are of equal value*

*Only THREE questions are to be attempted from EACH half.*

## FIRST HALF

*Examiner—DR. S. K. DAS, M.A., PH.D.*

1. Estimate the importance of the psychological approach to the problems of Religion. What function would you assign to Philosophy of Religion as distinguished from the Psychology of Religion?
2. Examine the position that 'Religion contains the ideal ground of Morality and Morality the real manifestation of Religion.' Review critically as well as historically the relation between Ethics and Religion, and indicate how far it is legitimate to claim that 'Ethics must be treated before Religion.'
3. Determine the question of the relative primacy of one or the other of the elements of cognition and will as deduced from our analysis of the Religious Consciousness. How would you balance the respective claims of each in religious life?
4. What is Mysticism? Examine its virtues as well as extravagances from the standpoint of Religion.
5. Expound the nature of religious authority and show to what extent tradition is serviceable here. Is tradition necessarily subversive of individual freedom in matters pertaining to religion?

## SECOND HALF

*Examiner—DR. S. K. DAS, M.A., PH.D.*

1. What is, in your opinion, the essence of the idea of God? Indicate the main stages in the development of the idea of God, with special reference to the contributions of the nineteenth century thinking.
2. What do proofs for the existence of God really prove? Show that 'a proof of God must start not from the fact of purposive action in things, which is doubtful, but of bare action which is not.'
3. Examine the probative value of the cosmological proof of God's existence, and in particular the moral form of it which argues from badness of the world to a good God. What is, after all, the religious motive of this proof?
4. Attempt a critical survey of the attributes of God consistent with the unity of the Divine nature. Develop in this connection the Indian distinction between *Svarūpalakṣaṇas* (essential attributes) and *Tatasthalakṣaṇas* (non essential attributes) of the Godhead.
5. 'For me a person is finite or is meaningless.' (Bradley).  
'Only the Infinite is completely personal.' (Lotze).  
Expound fully these two typical view-points with reference to the problem of personality of God, and examine the validity of the distinction between Absolute and God.

## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner—MR. S. C. CHATTERJI, M.A.**Answer ANY THREE questions.*

1. What do you understand by eternity? How is it related to change and time in general?
2. In what sense can we speak of the world's creation? How is the Creator related to the created world in general and finite spirits in particular?
3. Explain and examine the content of evolution as a cosmic principle, and discuss the main theories of evolution.
4. Critically consider the relative merits of theism and pantheism from the standpoint of logic and metaphysics, moral and religious experience.
5. Discuss the view expressed in the statement: 'Experience testifies to continuity of nature and absence of miracles.'

## SECOND HALF

*Examiner—MR. N. C. GANGULI, M.A.**Answer ANY THREE questions.*

1. Elucidate 'the mystery of personality' and explain it on the lines of Pringle-Pattison.
2. Expound the law of *karma* with reasons for and against it. Indicate whether it allows any room for God's omnipotence.
3. Is eternal life to be equated with 'merging in the Absolute of Monism' or 'living with the loving God of Theism'? Support your answer with arguments.
4. 'Evil, which is said to be simply good in the wrong place, disappears, as such, in the Absolute.' Criticise this statement.
5. Is divine sovereignty limited by human freedom and natural laws? Discuss the point at issue.

(SPECIAL BRANCH—INDIAN PHILOSOPHY)

(GROUP III)

(VEDANTA—TEXT)

## FIRST PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner—MR. KOKILESWAR BHATTACHARYYA, M.A.*

1. Answer the following :—

(a) Name some of the prominent writers with their works, on Sankara-school of Vedanta.

(b) Show what interrelation, if any, exists between the *Upanishads* and the *Brahma-sutras*.

(c) Name some of the founders of different schools of Vedanta with a brief notice of their views.

2. Write a short essay giving the fundamental teaching of Sankara-Vedanta.

3. Give the central idea contained in the commentary of Sankara on any two of the following *sutras* :—

(a) “अन्नस्तद्धर्मोपदेशात्” ।

(b) “श्रुतेस्तु शब्दमूलत्वात्” ।

(c) “सुम्वाद्यायतनं स्वशब्दात्” ।

(d) “रचनानुपपत्तेश्च नानुमानम्” ।

Or,

Explain fully any three of the following extracts :—

(a) यत्नं यदध्यासस्तत्कृतेन दोषेण गुणेन वा अनुमासेनापि न संबध्यते ।

(b) अतो न पुरुषस्यापारतन्त्रा ब्रह्मविद्या । किं तर्हि ? प्रत्यक्षादिप्रमाण-  
विषयवस्तुज्ञानवत् वस्तुतन्त्रा ।

(c) न हि अविद्याकल्पितेन रूपभेदेन सावयवं वस्तु सम्पद्यते ।

(d) न असौ उपभुज्यमाना पूर्वावस्था उत्तरावस्थायाः कारगमभ्युपगम्यते ।

(e) तस्मान्न प्रतिपत्तिविधिविषयतया शास्त्रप्रमाणकत्वं ब्रह्मणः ।

Or,

4. What is विज्ञानवाद ? State some of the reasons by which the Vijnana-vadins seek to prove their theory. Give also the points raised by Sankara in refutation of the विज्ञान-वाद, as detailed in the commentary on the *Brahma-sutras*.

## SECOND HALF

Examiner—DR. M. N. SARKAR, M.A., PH.D.

Answer ANY THREE questions.

1. Explain यथा च कारणं ब्रह्म विषु कालेषु सत्त्वं न व्यभिचरत्येवं कार्यमपि जगन्निषु कालेषु सत्त्वं न व्यभिचरति, with special reference to the Vedantic theory of causation. How does Sankara reconcile the eternity of effects with their illusoriness?

2. Develop fully the Vedantic conception of *Lila*. Is it consistent with a creative purpose? Fully discuss the question.

3. Explain with illustrations the Naiyayika conception of external (संवीन) and internal (समवाय) relations. Can internal relations be assimilated in the Absolute? Reproduce the views of Bradley and Sankara.

4. Fully explain after Sankara the Sutra ईकक्षिप्तमभवात्.

Can the law of contradiction be reconciled to the law of identity?

5. Explain the points of difference between Vijnana-vadi Baudhas and Sankara regarding external perception. How do you reconcile Sankara's affirmation of the reality of the “given” with its empirical ideality?

## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

(VEDĀNTĀPARIBHĀṢĀ)

*Examiner*—DR. ABHAYKUMAR GUHA, M.A., PH.D.*Answer ANY THREE*

1. Distinguish between प्रमादचिन्तनं, प्रमाणचिन्तनं, and विषयचिन्तनं. According to the Advaita Vedānta, चिन्तनं is one and the same. If so, how is it possible for it to assume three different shapes?
2. How does the Vedāntaparibhāṣā refute इन्द्रियतुल्यत्वम् of अन्तःकरणम्? What is the view of Śaṅkara to whose school the author belongs?
3. Give a critical account of the Vedāntic theory of perception.
4. Is "व्यतिरेकि अज्ञमान" of the Naiyāvika to be classed as अज्ञमान? What view does the Vedāntaparibhāṣā entertain on the matter?
5. Is "अनुपलब्धि" to be taken as a separate pramāṇa? Give reasons for your answer.

## SECOND HALF

*Examiner*—DR. SURENDRANATH DASGUPTA, M.A., PH.D.*Attempt ANY THREE*

1. Compare or contrast Rāmānuja's theory of illusory perception with that of the school of Śaṅkara Vedānta.
2. 'Perception reveals only pure being and all content is illusorily imposed on it.'  
Criticise the above from the point of view of Rāmānuja.
3. How do the Sankarites describe the falsity of the world-appearance, and how can it be criticised from the point of view of Rāmānuja?
4. How does Rāmānuja argue in favour of 'Jñānakarma-samuccaya-vāda' as against Śaṅkara?
5. Explain clearly the points of controversy between Rāmānuja and Śaṅkara and offer your own general criticisms on it.

(SPECIAL BRANCH—INDIAN PHILOSOPHY)

(GROUP V)

(VEDĀNTA—TRANSLATION)

## FIRST PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—MR. KOKILESWAR BHATTACHARYYA, M.A.*Attempt ANY THREE of the following*

1. Which of the ancient Upanishads contributed most to the interpretation of the *Brahma-sūtras* as given by Śaṅkara? What necessity was felt for such interpretations?

Some critics say Sankara's interpretations are more forced than those of Rāmānuja. Give your own views on this point.

2. In explanation of the relation between Brahma and the visible world (दृश्यवत्) we find the following line in one of Sankara's works :—

“एखादीदृश्यादौः सत्त्वस्य दृश्यसत्त्वस्यः” (i.e., the relation between Brahma and the world is like that of a piece of rope and the snake appearing on it).

Fully explain what you understand by this.

3. Does Sankara-Vedānta 'deny the place of desire and passion thus putting oneself off from all concrete individual interests'—in the words of Caird?

Examine this view and give your own estimate of the subject in the form of a short essay.

4. In reading Sankara-bhashya you must have come across what is known as the 'Vrittikara's view, as in the following sentence :—

“अनेकात्मकं ब्रह्म, यथा ह्यसौनेकशाखः एवमनेकाशक्तिप्रवृत्तियुक्तं ब्रह्म । अतः एकत्वं मानात्मकं उभयमपि सत्यम् ।”

Show how Sankara refutes this view.

5. Empirical Self and Transcendental Self—as described by Sankara.

## SECOND HALF

*Examiner*—MR. SURYYANARAYAN SASTRI.

*Answer ANY THREE questions.*

1. 'Just as, dear one, through one lump of clay, all that is made of clay is known, the modification being a name originated by speech, the clay alone being real.' How does Sankara interpret this text? Does it lead to Pantheism? Discuss.

2. Explain fully Sankara's view of relation, with special reference to his criticism of *samānyā*.

3. Consider the validity of the charge that Sankara's Advaita is but a revised version of Nāgārjuna's metaphysics.

4. Compare the views of Sankara and Rāmānuja on the question of the *Jīva* being a part (*amśa*) of *Īśvara*.

5. Explain and discuss Sankara's position on the question of free-will, comparing him with Kant.

## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—DR. SURENDRANATH DASGUPTA, M.A., PH.D.

*Answer ANY THREE*

1. Explain the Sāṃkhya-Yoga views of universals and contrast it with that of the Buddhists. What aspect of the Sāṃkhya-Yoga metaphysical position forced that school of thought to adopt their peculiar view of the universals and particulars.



2. Fully explain the position of morality in the Yoga scheme of emancipation.

3. Explain clearly the Yoga theory of illusion and its bearing on Yoga evolution and epistemology.

4. Explain clearly the nature of the influence of Purushas on Prakriti in determining its evolution.

5. Explain fully the theory of rebirth according to Yoga. What is your own conviction about it and how did you arrive at it?

## SECOND HALF

*Examiner*—DR. ABHAYKUMAR GUHA, M.A., PH.D.

*Answer ANY THREE*

1. 'This Nescience is neither "being," because in that case it could not be the object of erroneous cognition (bhrānti) and sublation (bādha); nor is it "non-being," because in that case it could not be the object of apprehension and sublation.'

Discuss.

2. 'The instruction (given by Indra about himself) (is possible) through insight based on Scripture, as in the case of Vāmadeva.'

Explain in the light of the context.

3. Is the individual soul चक्षु or विक्षु in the state of मोक्ष? Give reasons for your answer.

4. 'The non-difference of the world from Brahman, the highest cause, follows from what begins with the word ārambhāṇa.' Explain.

5. 'This self is essentially a knower, a knowing subject; not either mere knowledge or of non-sentient nature.'

Substantiate the above statement.

(SPECIAL BRANCH—INDIAN PHILOSOPHY)

(SĀṂKHYA-YOGA GROUP)

## FIRST PAPER

*All questions carry equal marks*

## FIRST HALF

*Examiner*—DR. SURENDRANATH DASGUPTA, M.A., PH.D.

*Answer ANY THREE*

1. What are the points of difference between the Kāpila and the Pātañjala school of Sāṃkhya?

2. Give a clear exposition of the Guṇa theory.

3. Explain clearly the nature of the influence of the Purushas in Yoga Epistemology, noting the divergences of the view of Vācaspati and Vijñāna Bhikṣu.

4. How do the Sāṃkhya and Yoga establish the existence of permanent souls and refute the Buddhist doctrine of momentariness?

5. Explain clearly the Sāṃkhya atheism and the theistic outlook of the Yoga.

## SECOND HALF

*Examiner*—DR. ABHAYKUMAR GUHA M.A., PH.D.*Answer ANY THREE*

1. What is मोक्ष according to the Sāṃkhya system? Is it a positive or negative state?
2. How do the Sāṃkhyas define प्रकृति? How do they account for the first impulse of प्रकृति?
3. What are the characteristics of पुरुष according to the Sāṃkhya philosophy? What reasons do they offer in support of the existence of पुरुष?
4. “उपरागतं कर्तुं चित्-सान्निध्याच्चित्-सान्निध्यात् ॥”  
Explain.
5. “तस्मादास्तिकशास्त्रस्य न कस्याप्यग्रामाख्य विरोधो वा, स्वस्वविषयेषु सर्व्वेषामवावाद्विरोधाच्चेति ।”  
Discuss.

## SECOND PAPER

*All questions carry equal marks*

## FIRST HALF

*Examiner*—DR. SURENDRANATH DASGUPTA, M.A., PH.D.*Attempt ANY THREE*

1. Explain clearly the parināma theory of Sāṃkhya and Yoga in contrast with the Vivartha views of the Vedānta.
2. Give a clear exposition of Yoga psychology and its relation to the attainment of Kaivalya.
3. Give a clear exposition of Yoga Ethics.
4. Explain clearly the Sāṃkhya-Yoga doctrine of causation and the theory of universals and particulars.
5. Discuss the Sāṃkhya-Yoga view of the reality of the world in contrast with the Vedantic idealism of the falsity of the world appearance.

## SECOND HALF

*Examiner*—DR. S. N. MAITRA, M.A., PH.D.*Answer ANY THREE questions.*

1. What, according to Yoga, is Puruṣa's relation to Chitta (a) in the state of bondage, (b) in the state of freedom? Give your own estimate of the Yoga view in this respect.

2. Explain the Yoga view of concentration as a means to self-isolation.
  3. Discuss self-evacuation as a spiritual ideal and compare it with the Western ideal of self-fulfilment.
  4. How, according to Yoga, is *Isvara* related (a) to other selves, (b) to the world? Compare the Yoga view in this respect with the Nyāya view.
  5. Explain the distinctive features of Yoga Ethics and discuss the question how far Yoga ethical ideals are in line with orthodox Hindu views.
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## COMMERCE

### FIRST PAPER

#### (REALISTIC ECONOMICS)

*The questions are of equal value*

#### FIRST HALF

*Examiner*—DR. N. SANYAL, M.A., PH.D

*Attempt any THREE questions*

1. Examine the aims and methods of 'rationalisation' of industries. Consider its scope in the field of Indian industries generally.
2. Distinguish between 'constructive' and 'manipulative' speculation. Discuss their advantages and disadvantages.
3. What are the various methods for securing industrial peace? Examine their applicability to Indian conditions.
4. How far is a country's foreign trade an index of its prosperity?
5. 'The sight exchange between two countries cannot be rising on one side and falling on the other.' Elucidate the statement.

#### SECOND HALF

*Examiner*—DR. J. P. NIYOGI, M.A., PH.D.

*Answer any THREE questions*

1. What are the economic consequences of a sharp decline in the general level of prices? Are rising, falling, or steady prices best for society?
  2. Discuss the advantages and limitations of municipal enterprise in the field of industry and commerce.
  3. Critically examine the statement that complete freedom of trade would bring about an equalisation of wages all over the world.
  4. 'No country can permanently lose in respect of its natural advantages for industries by changes in the external value of its currency.' Critically examine this statement with reference to the controversy over the 1s. 6d. ratio in India.
  5. Discuss the advantages and disadvantages of competition in transport services.
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## SECOND PAPER

## (ACCOUNTANCY)

*The questions are of equal value*

## FIRST HALF

*Examiner—MR. S. R. BALTIBOI, F.S.A.A.*

*Only THREE questions out of the five are to be attempted, of which No. 2 is compulsory and should be attempted by all*

1. H. Hamid is insolvent. From the following particulars prepare his Statement of Affairs, stating how much in the Rupee may be expected, allowing Rs. 3,000 costs:—

	Rs.
Creditors for Rent, Rates, etc. ... ..	6,500
Creditors fully secured ... ..	40,000
Creditors partly secured ... ..	1,20,000
Creditors unsecured ... ..	1,60,000
Plant (estimated to produce Rs. 65,500) ... ..	1,00,000
Stock (estimated to produce Rs. 22,400) ... ..	32,000
Book Debts, good ... ..	20,000
Book Debts, doubtful (expected to realise Rs. 10,000) ... ..	20,000
Book Debts, bad ... ..	8,000
Household Furniture (expected to realise Rs. 7,000) ... ..	7,000
Life Policy for Rs. 30,000, surrender value ... ..	12,000
Loan on Life Policy with interest accrued ... ..	10,400

The estimated value of securities held by fully secured creditors is Rs. 60,000 and those held by partly secured creditors, Rs. 60,000.

2. The Fasli Trading Co., Ltd., was registered with an authorised capital of Rs. 2,00,000 divided into 10,000 6 per cent. preference shares and 10,000 ordinary shares of Rs. 10 each. The following balances were open on the books on December 31st, 1930:—

	Rs.
Ordinary Share Capital Account ... ..	82,500
6 per cent. Preference Share Capital Account ... ..	50,000
Calls unpaid on Ordinary shares ... ..	1,250
Sundry Creditors ... ..	12,600
Additions to Machinery ... ..	3,000
Commission ... ..	1,600
Work executed ... ..	3,70,000
Goodwill ... ..	30,000
Rent, Rates, and Taxes ... ..	9,000
Stock at January 1st, 1930 ... ..	37,820
Wages ... ..	2,10,000
Profit and Loss A/c. Jan. 1st 1930, Cr. Balance ... ..	3,100
5 per cent. Debentures ... ..	60,000
Sundry Debtors ... ..	50,000
Forfeited Shares Account ... ..	3,000
Machinery and Plant, Balance, Jan. 1st, 1930 ... ..	40,000
Purchases ... ..	1,50,000
Stationery ... ..	3,000
Office Furniture ... ..	8,000

				Rs.
Bad Debts Reserve	...	...	...	6,000
Interim Dividend paid on Preference Shares	...	...	...	3,000
Salaries	...	...	...	23,000
Directors' Fees	...	...	...	5,000
Cash on account of works in progress	...	...	...	50,000
Discounts Received	...	...	...	2,300
Cash at Bank	...	...	...	28,000
General Expenses	...	...	...	8,100
Cash in Hand	...	...	...	100
Audit Fee	...	...	...	630
Debenture Interest paid	...	...	...	3,000

Prepare Trading and Profit and Loss Accounts for the year ended December 31st, 1930, and Balance Sheet at that date. The Directors propose to place Rs. 20,000 to Reserve and to pay the dividend due to the preference shareholders and declare a dividend of 10 per cent. on the ordinary shares, carrying forward the balance. Show these proposals in an Appropriation Account.

The Stock and works in progress at December 31st, 1930, were taken at:—

				Rs.
Stock, General	...	...	...	62,200
Stock, Stationery	...	...	...	1,000
Works in progress	...	...	...	75,000
Works in progress, profit accrued	...	...	...	5,000
Machinery to be written down by	...	...	...	4,300

3. Black is in business. His assets, exclusive of goodwill, are valued at Rs. 3,00,000, and his liabilities are Rs. 20,000. White is in business. His assets, exclusive of goodwill, are valued at Rs. 2,00,000, and his liabilities are Rs. 15,000. Their net profits for the last three years have been:—

		Black. Rs.	White. Rs.
1st year	...	6,000	4,000
2nd year	...	7,000	5,000
3rd year	...	8,000	6,000

They agree to sell their businesses to a limited liability company to be formed with a nominal capital of Rs. 10,00,000 divided into 60,000 5 per cent. preference shares of Rs. 10 each and 40,000 ordinary shares of Rs. 10 each, the company taking over assets and liabilities. It is also agreed that Black and White shall each receive fully paid preference shares in consideration of goodwill calculated on the basis of two years' purchase on the average past three years' profits; the balance of purchase price to be paid in cash. The public subscribe and pay in full for 20,000 preference shares and 35,000 ordinary shares. The company paid preliminary expenses Rs. 15,000.

Show the vendors' accounts in the company's ledger and the balance sheet of the company after these transactions have been completed.

4. Prepare Manufacturing and Profit and Loss Accounts from the following figures, and a Cost Sheet showing the cost of production per article made and sold. The sales consist of radio sets at the uniform selling price of Rs. 200 each:—

				Rs.
Wages	...	...	...	2,28,000
Salaries	...	...	...	8,550
Purchases	...	...	...	2,60,750

	Rs.
Sales	5,70,000
Opening Stock	20,000
Motive Power	28,750
Carriage Inwards	950
Rent, Factory	4,750
Rent, Office	3,800
General Expenses	7,600
Commission	1,900
Machine Repairs	2,850
Machine Depreciation	4,750
Closing Stock	10,000

5. A. B. is in business and has one Bought Ledger, three Sales Ledgers (town, country, and agents), and a General Ledger. The balances on these ledgers were on May 1st, 1931, as follows:—

DEBIT BALANCES: Town Rs. 13,700; Country Rs. 21,710; Agents Rs. 4,760.

CREDIT BALANCES: Bought Ledger Rs. 31,310; General Ledger Rs. 20,980.

The CASH BALANCE as at that date was Rs. 12,120.

During the month of May the Cash Book showed:—

RECEIPTS: Town Rs. 31,300; Country Rs. 21,700; Agents Rs. 1,790.

PAYMENTS: Bought Ledger Rs. 42,120; General Ledger Rs. 21,300.

The SALES were Town Rs. 33,360; Country Rs. 31,610; Agents Rs. 8,700.

The PURCHASES were Rs. 38,200. The JOURNAL TRANSFERS were. Town Ledger Cr. and Bought Ledger Dr., Rs. 5,200.

The CASH BALANCE on May 31st, 1931, was Rs. 3,430. Prepare adjustment accounts as they should appear in General Ledger on 31-5-31 and show the Trial Balance of the books.

## SECOND HALF

*Examiner*—MR. RANJIT RAY, A.C.A.

*Answer any TWO questions and Question No. 4*

1. A and B are in partnership, sharing profits and losses equally. A holds 5/6th of the capital in the partnership and B holds the balance. Their assets and liabilities on the 1st Jan., 1931, were as follows:—

<i>Assets.</i>		<i>Liabilities.</i>	
	Rs.		Rs.
Plant	30,000	Creditors	10,000
Lease	20,000		
Debtors	12,000		
Stock	15,000		
Cash	5,000		

On that day they sold the business (including cash) as a going concern to a private limited liability company, formed for the purpose, with a nominal capital of Rs. 1,20,000 divided into 12,000 shares of Rs. 10 each. The purchase price agreed with the company was Rs. 1,06,000, to be satisfied by taking over the creditors, and the balance by the allotment of fully paid up shares to A and B in proportion to their interests in the partnership.

The preliminary expenses were Rs. 2,000, paid in cash. Show the opening Balance Sheet of the company and the realisation account and partners' accounts in the partnership books duly closed.

2. (a) The M. Manufacturing Co., Ltd., had an issued capital of Rs. 10,00,000 in Ordinary Shares of Rs. 100 each, on which Rs. 75 per share had been called up and paid. A final call was made, and all amounts were paid except Rs. 250 due from a shareholder who owned 10 shares. These shares were forfeited and re-issued at Rs. 90 per share for cash. Show the necessary entries in the ledger recording all transactions from and including the date of the call and the balances of these accounts as they would appear in the Balance Sheet.

(b) Y owes X Rs. 5,000 for goods on 1st Jan., 1931. X draws a bill on Y for that amount at 3 months. Y accepts the same. On the same day X discounts the bill at his Bankers at 6 per cent. On maturity, as Y is unable to meet the bill in full, X gives Y a cheque for Rs. 2,500 to enable him to do so, and draws on Y for the balance at 4 months plus interest at 6 per cent. The bill is duly met. Show the transactions as they will be recorded in the books of both X and Y.

3. R's Balance Sheet at 31st Dec., 1930, was as follows:—

<i>Assets.</i>		<i>Liabilities.</i>	
	Rs.		Rs.
Creditors	... 2,000	Plant	... 10,000
Capital	... 27,000	Stock	... 8,000
		Debtors	... 4,000
		Cash	... 7,000
	<u>29,000</u>		<u>29,000</u>

C's Balance Sheet as at 31st Dec., 1930, was as follows:—

<i>Assets.</i>		<i>Liabilities.</i>	
	Rs.		Rs.
Creditors	... 9,000	Plant	... 25,000
Bank overdraft	... 8,000	Stock	... 6,000
Capital	... 21,000	Debtors	... 7,000
	<u>38,000</u>		<u>38,000</u>

A private limited company called R. & C. Ltd. is formed, with a nominal capital of 10,000 Rs. 10 shares, to take over the businesses as going concerns as at the date of the Balance Sheets on the following terms:—

R's Balance Sheet: Plant to be taken at Rs. 16,000. Stock to be taken at Rs. 6,000. A Reserve of Rs. 1,000 to be raised for Bad Debts.

C's Balance Sheet: Stock to be taken at Rs. 7,000 and a Reserve of Rs. 2,000 to be made for Bad Debts.

Generally: R to receive 3,500 fully paid shares as the purchase price of his business, and C to receive 2,500 fully paid shares as the purchase price of his business. 3,000 shares of Rs. 10 are taken up and paid for in full by a friend of R's. The preliminary expenses of Rs. 1,400 are paid in cash by the company. The overdraft at C's bank is paid off by the company and R's bank balance is transferred to the company's account. Show the opening Balance Sheet of the company after the above arrangements have been completed.

4. Dutt & Das are equal partners. They admit Sen to 1/3 interest in the partnership on the 1st Jan., 1930, on the condition that he contributes Rs. 30,000 to be left in the business, of which sum Rs. 10,000 is to be for

Goodwill. The Balance Sheet of Dutt & Das at this date was as follows:—

	Rs.		Rs.
Creditors	3,700	Property	10,000
Dutt	20,000	Debtors	6,500
Das	10,000	Cash	17,200
	<u>30,000</u>		
	33,700		<u>33,700</u>

(a) Prepare the opening Balance Sheet of Dutt, Das & Sen.

They trade for a year, at the end of which time their Balance Sheet shows the following alterations when compared with that at 1st Jan., 1931. Creditors increased by Rs. 6,160. Debtors decreased by Rs. 3,300. Cash is Rs. 23,600. Dutt's Capital a/c is Cr. Rs. 8,000; Das's Capital a/c. Cr. Rs. 9,000; and Sen's Capital a/c. Cr. Rs. 9,940.

They agree to dissolve partnership forthwith. The property realises Rs. 8,000 and Das takes over the Book debts for Rs. 3,000. The cost of Realisation is Rs. 500.

(b) Prepare final accounts.

5. The balances taken from the books of the Western Railway Company at 31st Dec., 1930, are as shown below. Prepare therefrom the Capital Account and Balance Sheet based on the Double Account principle, Summary of Revenue Accounts, and a statement showing the proposed appropriation of net income. The Directors recommend a dividend of 4 per cent. on Rs. 2,00,00,000 4 per cent. Preference Shares and 5 per cent. on the Rs. 3,00,00,000 Ordinary Shares.

	Rs.	Rs.
Sundry Debtors and Creditors	6,00,000	12,00,000
Closing stock	16,60,400	
Investments	68,00,000	
Cash	8,00,000	
General Reserve		40,00,000
Lines open for Traffic	4,00,00,000	
Lines open for Traffic during year	20,00,000	
Road Vehicles	8,00,000	
Interest on Loans	2,50,000	
Transfer fee		400
Railway Receipts and Expenses	50,00,000	80,00,000
Interest and Dividends		3,20,000
Shares and Stocks		5,00,00,000
Loans		50,00,000
Hotel Expenses and Receipts	2,50,000	3,00,000
Due to Clearing Houses		50,000
Fire Insurance Fund		40,00,000
Bus Receipts and Expenses	1,00,000	1,20,000
Debenture Stock		1,00,00,000
Debenture Stock during the year		50,00,000
Rolling Stock	1,22,00,000	
Rolling Stock during the year	25,00,000	
Interest on Debenture Stock	7,50,000	
Hotels	50,00,000	
Manufacturing and Repairing Plant	80,00,000	
Manufacturing and Repairing Plant during the year	15,00,000	
Profit and Loss Balance brought forward		9,20,000
	<u>8,82,10,400</u>	<u>8,82,10,400</u>



## THIRD PAPER

## (COMMERCIAL LAW)

*The figures in the margin indicate full marks.*

## FIRST HALF

*Examiner—DR. RADHABINOD PAL, M.A., D.L.*

*To answer Question 6 and any THREE of the rest*

1. Briefly state the law relating to the formation of a contract. 10  
Discuss the principles laid down in the *Carbolic Smoke Ball Co.'s case*.
2. (a) A promises to B that, in case C will render to A some specified service, A will pay B Rs. 10,000. C, at the request of B, renders A the specified service. 10  
(b) A promises to C that if the latter will render some specified service to former, the former (A) will pay B Rs. 10,000. Thereupon C renders that specified service to A.  
If now A declines to pay the promised sum to B in either case, what will be B's remedy? Give reasons for your answer.
3. Explain the difference between 'joint' liability and 'joint and several' liability. 10  
Examine the legal position of joint promisors under the Indian Contract Act.
4. A distinguished American Jurist says that in every contract the promisor undertakes certain risks. 10  
Examine this.
5. Examine how far a person is allowed by law to constitute himself the creditor of another. 10
6. 'When a contract has been broken, if a sum is named in the contract as the amount to be paid in case of such breach, or if the contract contains any other stipulation by way of penalty, the party complaining of the breach is entitled, whether or not actual damage or loss is proved to have been caused thereby, to receive from the party who has broken the contract reasonable compensation not exceeding the amount so named or, as the case may be, the penalty stipulated for.' (Section 74 of the Indian Contract Act.) 20  
Comment on this section, with reference to the principle that 'the incidents of a legal relation constituted by a contract are generally governed by the intention of the parties.'

*Or,*

- Discuss, with reference to the leading cases, the essential requisites for awarding special damages in cases of breach of contract. 20

## SECOND HALF

*Examiner—MR. N. C. CHATTERJEE, M.A., B.L., BAR.-AT-LAW.*

*To answer Question 1 and any TWO of the rest*

1. Write a short essay on the Law of Agency. 20
2. Examine the effect of war on contract, with special reference to the decision in *Ertel Bieber & Co. v. Rio Tinto Co., Ltd.* 15
3. Write short notes on any two of the following:— 15  
(1) Warranty; (2) Market overt; (3) Doctrine of caveat emptor; (4) Doctrine of stoppage in transit.

4. Examine the position of an 'infant' as a partner in a firm. 15
5. Write a short note on 'contracts of affreightment.' 15
6. A advances money to B and takes a promissory note from him in the name of C (C thus being only A's benamdar). B failing to repay the amount, A brings a suit on the promissory note against B for the recovery of the amount. B pleads that as the promissory note stands in the name of C, A's suit must fail. Examine the validity or otherwise of this plea. 15
7. Draw up a 'memorandum of association' for a company limited by guarantee. 15

#### FOURTH PAPER

#### (BANKING)

*The questions are of equal value*

*Only THREE questions need be answered from each half*

#### FIRST HALF

*Examiner—MR. B. R. RAU, M.A., L.T.*

1. Write explanatory notes on *any four* of the following :—
  - (a) The world bank rate.
  - (b) Forward Exchange.
  - (c) Garnishee order.
  - (d) Continuing guarantee.
  - (e) Circular letter of credit.
2. Explain clearly how the Exchange Banks finance the foreign trade of our country. Outline a scheme for the financing of our foreign trade with the help of our domestic resources.
3. Can a Central Bank check speculation on the Stock Exchange? What lessons do you infer from the recent American speculative crash?
4. (a) Discuss the risks that a banker runs in opening a current account without any introduction or reference.  
(b) Explain the circumstances which compel a banker to stop the payment of a cheque.
5. Comment on the position of the indigenous banker of this country in the banking organisation as a whole. How do you propose to improve his position and standing in the money market of the country.

#### SECOND HALF

*Examiner—MR. N. I. CHANDAN, B.Sc.*

1. Write short notes on *any four* of the following :—
  - (a) Mint Par of Exchange.
  - (b) Revolving Credit.
  - (c) Budli Transactions.
  - (d) Bankers' Lien.
  - (e) Not Negotiable.
  - (f) Equitable Title.
2. Explain the risks which a collecting banker runs in purchasing from strangers cheques drawn upon other bankers.

3. Discuss the reasons for the reluctance on the part of modern commercial banks to make advances against the security of immovable property.

4. In what respects does the Imperial Bank of India differ from the central banks of the leading European countries? Examine the reasons which led the Hilton Young Commission to recommend the starting of a new Reserve Bank of India.

5. Explain Specie Points and state the factors which account for changes in the same.

### (BUSINESS ORGANISATION)

*The questions are of equal value.*

THREE questions are to be attempted from EACH half

#### FIRST HALF

*Examiner*—MR. G. BASU, A.S.A.A.

1. In Marine Insurance, what is meant by the term 'Average'?

Distinguish between 'Particular' Average and 'General' Average.

Calculate the amount of Particular Average in the following case:—

Owing to a heavy storm at sea, a portion of a consignment of sugar from Java is damaged. The insured value of the damaged property is Rs. 10,000. It is estimated that but for the damage this portion of the consignment would have realised Rs. 12,000. The estimated value of the damaged property, as ascertained by Chartered valuers, is Rs. 10,800.

2. Carefully distinguish between (a) Futures Proper, (b) Options, and (c) Straddles.

In a straddle operation, suppose a dealer buys cotton which is to be delivered in June or July at 5d. per lb., and sells the same quantity of futures deliverable in July or August at  $5\frac{1}{4}$ d. per lb.; then whether the prices rise or fall as a whole, show that he loses if the differences between the two prices becomes greater than  $\frac{1}{4}$ d.

3. What are the main points of distinction between Insurance and Wager?

Also point out and discuss the special case when an Insurance Policy loses sight of the principle of indemnity.

4. What are the principal provisions to be contained in the Articles of Association of a company whose shares may obtain an official quotation on the London Stock Exchange?

5. Show how in Germany and America banks have contributed to the development and control of industrial concerns. Compare these conditions with those obtaining in India.

#### SECOND HALF

*Examiner*—MR. N. N. SARKAR, M.A.

1. Explain the following terms and abbreviations:—

(a) Garnishee Order, (b) Open Policy, (c) Arbitrage, (d) Backwardation, (e) Cheque Rate, (f) Dead Freight, (g) Firm Offer, (h) One Man Company.

2. The chief economic factors of production are said to be Land, Labour, Capital, and Organisation. Show which of these functions is undertaken by the Board of Directors of a public company.

With reference to the present conditions prevailing in Bengal, explain what particular difficulties the Board of Directors may have to encounter in the organisation of the cotton mills company in Bengal.

3. Explain, in detail, three of the principal methods of remunerating labour. Which of these do you consider best suited for the conditions in a jute mill? Give reasons for your answer.

4. What are the possible benefits to be derived and what are the usual drawbacks in setting up a detailed system of costing in a large industrial concern?

5. A joint-stock company is being promoted for the establishment of a large chemical industry. It will be some time before the building, plant, and machinery will be ready for use. The money market being very tight, the promoters decide that some inducement in the shape of payment of interest on fully paid up shares must be held out so that an adequate amount of share capital may be raised.

Indicate what steps, under the Indian Companies Act, must be taken for the accomplishment of this object.

### (INDUSTRIAL STRUCTURE AND DEVELOPMENT)

*The questions are of equal value.*

#### FIRST HALF

*Examiner*—MR. B. R. RAU, M.A., L.T.

*Answer any THREE questions*

1. Discuss the causes that have contributed to the growth of rapid increase of giant businesses in the modern industrial world. Why are vertical integrations less frequent than horizontal combinations?

2. What do you consider to be the most appropriate machinery for improving the relations between employers and workmen?

3. Discuss the potentialities of the development of (a) chemical industries, (b) shipbuilding industry in India.

4. What are the present methods of recruitment of labour for Indian industries? Are there any defects in these methods and, if so, how do you propose to remove them?

5. Discuss the causes of industrial unemployment in India. Indicate the methods of relief you would advocate for alleviating distress due to such unemployment.

#### SECOND HALF

*Examiner*—MR. R. M. CHAUDHURI, M.A.

*Answer any THREE questions*

1. In what different ways has Government intervened in modern industries? How far has such intervention been conducive to industrial efficiency?

2. Indicate the reasons for the decline of the Lancashire cotton industry in recent years.

3. Discuss the causes that led to the phenomenal industrial development of Germany since 1871.

4. Explain the nature of financial difficulties experienced by small and middle-class industrialists in India. How would you propose to remedy them?

5. How would you combine industries with agriculture to solve the problem of rural unemployment in India?

6. Give an idea of the labour movement in France during the latter half of the 19th century. In what ways does it differ from the contemporary labour movement of Great Britain?

### (ECONOMIC GEOGRAPHY)

*The questions are of equal value*

*Answer any THREE from EACH half*

#### FIRST HALF

*Examiner*—DR. HARISCHANDRA SINHA, M.Sc., Ph.D.

1. 'Industrialism must rest on coal.' Critically examine this statement.

2. Give a brief sketch of the oil resources of different nations. Mention some of the recent scientific developments which are likely to affect the trade.

3. 'With the increasing industrial development of the United States, the importance of the North Atlantic route will be diminished.' Discuss this statement.

4. What do you know of the Five Year Plan in Russia? How far, in your opinion, is it likely to be successful?

5. Examine and estimate the mineral wealth of China.

#### SECOND HALF

*Examiner*—MR. MOHITKUMAR GHOSH, M.A., B.COM.

1. What do you know of the present movement for the restriction of production of raw materials? Illustrate your answer with examples from India.

2. State concisely the present position of the wheat trade. Do you think that the present import duty on wheat in India is justified?

3. Critically discuss, with the help of a sketch map, the distribution of various types of irrigation works in this country.

4. Describe the present position of the salt trade in India. How will the recent import duty affect consumers in Bengal?

5. Analyse the causes of the present trade depression in India. How far have non-geographical causes aggravated the crisis?

### (CURRENCY)

*The questions are of equal value*

#### FIRST HALF

*Examiner*—MR. B. R. RAU, M.A., L.T.

*Only THREE questions to be attempted*

1. Discuss the economic consequences of inflation and deflation of currency.

3. Explain clearly how a bank system can control the price-level.
3. What do you mean by the remonetisation of silver? Examine the merits of this proposal from the standpoint of Indian monetary progress.
4. Explain the main significance of the international gold standard system. Briefly discuss the reasons for international gold movements.
5. Examine the main reasons for the breakdown of the Gold Exchange Standard in India during and after the War.

## SECOND HALF

*Examiner*—DR. B. B. DASGUPTA, M.A., PH.D.

*Answer any THREE*

1. Discuss certain noteworthy aspects of the severe slump in prices since the autumn of 1929. What are its causes?
2. It is apprehended that the world's trade will shortly outrun the world's gold supply. What evil consequences are likely to ensue in such an eventuality, and what possible remedies would you suggest?
3. Explain the working of the Gold Bullion Standard as recommended by the Hilton-Young Commission for India.
4. 'An absolutely dependable index number of prices has yet to be found.'  
Discuss the statement.
5. State and criticise the doctrine of purchasing power parity.

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## (STATISTICS)

*The questions are of equal value*

## FIRST HALF

*Examiner*—MR. S. N. BANERJEE, M.A.

*Answer only THREE questions*

1. Write a concise note on the practical objects of Statistics in business.
2. What is meant by the 'statistical unit'? Give in brief outline a scheme of the classification of statistical units in connection with business phenomena. Illustrate your answer by examples.
3. Discuss briefly the advantages and disadvantages of semi-logarithmic curves for presentation of statistical data.
4. Explain fully the construction and uses of the 'moving average curve' for representation of secular trend.
5. Indicate briefly the method of the construction of Index Numbers of Real Wages, pointing out the limitations to their interpretation in international comparisons.

## SECOND HALF

**Examiner—MR. S. M. GANGULI, M.A., D.Sc.***Only THREE questions to be attempted*

1. Explain the principle of *interpolation*. The pressure of wind in pounds per square foot corresponding to the velocity in miles per hour has been determined by experiment to be approximately as follows :—

Velocity	Pressure
15	1·1
20	2·0
30	4·4
40	7·9
45	8·3

Estimate the pressure for a velocity of 25 miles per hour.

2. Define *weighted average*.

The average prices of Jute and the quantities sold at several places are given below :—

Place	Average price per md.	Quantity sold (md.)
Na'aingunge ...	Rs. 7-8 as.	32,000
Mymensingh ...	Rs. 7-12 as.	15,000
Seraingunge ...	Rs. 8-2 as.	12,000
Madaripur ...	Rs. 6-14 as.	1,000
Chandpur ...	Rs. 7-6 as.	16,000

Find the mean price for the several places, weighting each local average with the quantity sold.

Would it be possible for the average price at each of the above places to rise from one year to the next and yet for the weighted mean price to fall? If so, under what conditions?

3. What do you understand by *Standard deviation*? Show that the mean square deviation is least when deviations are measured from the arithmetic mean.

Find the mean and standard deviation for the sizes of the rooms given below:—

Area of room in sq. ft.	30-40	40-60	60-80	80-100	100-120	120-140	140-160
Number ...	3	14	16	36	31	35	35

4. What are the advantages and disadvantages of the *Mode* as a Type? Apply the process of grouping in locating the mode to the following data:—

Size of item	5	6	7	8	9	10	11	12	13	14	15	16	17
Frequency	48	52	56	60	62	60	58	56	63	60	48	40	32

5. Define Karl Pearson's *correlation coefficient*. What inferences can you draw from the values +1, 0, and -1 of this coefficient?

Examine whether there is any causal connection between the following groups of data:—

X	Y	X	Y
22	18	28	27
24	20	29	21
26	20	30	29
27	22	30	32
27	24	31	27

### (AUDITING)

*The questions are of equal value*

*Answer only FOUR questions from EACH half*

### FIRST HALF

*Examiner*—MR. N. K. MAJUMDAR, M.A.

1. The Directors of a Film Company incurred the following expenses during the year under audit:—

- New piano Rs. 4,840 replacing worn out instrument sold for Rs. 240.
- Legal and other expenses incurred in obtaining power from the local authorities to open on holidays and on festival days, Rs. 1,500.



(c) Alterations to emergency exits upon the requisition of the licensing authority, Rs. 1,050.

(d) Cash payments in connection with a new lease (16 years)—Ground landlord for commuted rent, Rs. 4,700 (future annual rent, Rs. 2,3000). Law costs, etc., Rs. 350.

Differences have arisen among the Directors regarding the proper allocation of the above items as between capital and revenue and, as auditor to the company, you have been requested to state your views.

Submit your report to the Directors.

2. As auditor of a limited company, you are asked by the Directors to advise them with regard to the payment of an Interim Dividend. To what points would you give attention in considering this matter, and what information would you require to enable you to form an opinion?

Information would you require to enable you to form an opinion?

3. Submit your criticism on the following Balance Sheet:—

*Balance Sheet as at 31st Desember, 1930.*

	Rs.		Rs.
Authorised, Issued, and Subscribed capital, less calls in arrears ...	10,65,800	Land, Building Leases, Patents and Goodwill at cost less Deprecia- tion written off to 31st December, 1926 ...	29,00,000
Reserve and other Funds ...	5,00,000	Preliminary Expenses ...	85,000
8 per cent Debentures ...	10,00,000	Stock and Work in pro- gress, inclusive of estimated profit ...	2,25,000
Other Loans—Rs.		Debtors less Reserve ...	2,28,000
Secured ...	9,25,000	Loans to and shares in subsidiary companies ...	9,50,000
Unsecured ...	4,00,000	P. & L. a/c as per Account attached ...	9,02,800
	13,25,000	Bank and cash balances ...	50,000
Interest accrued on De- bentures and Loans ...	1,75,000		
Subsidiary Companies ...	5,00,000		
Sundry creditors and other trade liabilities ...	7,75,000		
	Rs. 53,40,800		Rs. 53,40,800

The authorised issue of Debentures is Rs. 20 lacs, of which 10 lacs are pledged with secured creditors. The Debentures are repayable on 31st December, 1932. Of the book debts, Rs. 10,000 are due by the ex-Manager and Rs. 5,000 by the Managing Director. The subsidiary companies are four in number and are conducted by the Managing Agents of the parent company. The shares of the subsidiary companies are of Rs. 100 each, Rs. 50 paid up. The Bank overdraft of one of the subsidiary companies is guaranteed by the parent company.

4. A client of yours, who is the largest shareholder in a private limited company, desires to nominate you as auditor in place of the existing auditor who offers himself for re-election. What steps must your client take to effect his purpose?

5. A limited company was registered for the purpose of purchasing an existing business as from July 1st. The business was taken over as on September 1st—the date when the company was entitled to commence business.

In due course, accounts were prepared which disclosed a loss of Rs. 5,692 for the period July 1st to September 1st. As auditor to the company, how should you require this loss to be dealt with?

## SECOND HALF

*Examiner*—MR. S. N. MOOKERJEE, F.S.A.A.

6. State concisely the effect of the decision in the Court of Appeal in the case of *Ammonia Soda Company v. Chamberlain* relating to the payment of dividends by Directors of a company.

*Or,*

It is said, 'Vouching is the very essence of auditing.' Explain fully your view on the statement.

7. Give the items you would expect to find on the Assets side of the Balance Sheet of a Bank and state briefly what steps you would take to verify the correctness of each.

8. What are investigations? Give typical examples of investigations, indicating objects and purposes and parties on behalf of whom such investigations are undertaken.

In particular, describe the conduct of an investigation on behalf of a company to be formed to acquire a business as a going concern, the special points to be attended to, the adjustments of profits and losses to be made, and the Certificate you will be prepared to sign of profits for insertion in the Prospectus of the New Company.

9. The following assets are in the Balance Sheet of an Insurance Company of which you are auditor. How would you satisfy yourself as to the correctness?—

- (a) Loans on Company's Policies within their surrender value.
- (b) Investments in Reversions.
- (c) Agents' Balances
- (d) Outstanding Premiums.
- (e) Imperial Bank of India shares.

10. What are the special points to be observed in the audit of a Landed Estate?

## (PUBLIC FINANCE)

*The questions are of equal value*

## FIRST HALF

*Examiner*—PROF. P. N. BANERJEE, M.A., D.Sc.

*THREE questions only to be attempted*

1. Discuss the extent of the financial powers vested in the central legislature and the provincial legislatures of India under the present constitution.

2. Give a brief account of the development of provincial finance in India.

3. Describe the main sources of income of local bodies in Bengal. Indicate the directions in which new sources of income appear likely to be secured for local finance in the province.

4. Briefly trace the history of the salt tax in India.

5. Describe the constitution and character of the existing public debt of India. Is the burden of the debt heavy?

## SECOND HALF

*Examiner*—PROF. S. C. RAY, M.A.*Attempt only THREE questions*

1. Explain the general principles governing (1) the internal, (2) the external, taxes on commodities.

2. Define 'Taxable capacity.'

How would you determine the taxable capacity of a nation?

What are the difficulties in the way of such determination?

3. Classify the Public Expenditure of India in accordance with the following two principles:—

(a) Preservation of the social life of the community.

(b) Improvement of the quality of that social life.

Estimate some of the difficulties in the classification of Public Expenditure.

4. Differentiate between (1) proportional, (2) progressive, (3) regressive, and (4) degressive taxes. Give examples from the Indian system.

Estimate the effects of each of these kinds of taxes on the inequalities of income.

5. 'The development of the budgetary practice is bound up with the rise of representative Government. . . The Budget is an essential factor in responsible Government.'

Explain this statement fully.

Describe the different stages in Budget procedure in India.

## (TRANSPORT)

*The questions are of equal value**Answer any THREE questions from EACH half*

## FIRST HALF

*Examiner*—MR. M. K. GHOSH, M.A., B.COM.

1. Explain clearly the meaning of the term 'Classification.' Discuss fully the factors which influence classification.

2. Discuss how far railway rates can be utilised in supporting the tariff policy of a country. Illustrate your answer by taking some concrete examples.

3. Write notes on:—

(a) Export and Import Rates.

(b) Pooling arrangements.

(c) Organisation of the Railway Department of the Government of India (Railway Board) as suggested by the Acworth Committee.

4. Critically discuss the advantages and disadvantages of Road Transport as compared to those of Railway Transport.

5. Examine the causes of the supersession of horse transport by motor transport. Is motor transport always more economical than horse transport? Discuss the conditions under which horse transport can maintain its position against motor transport.

## SECOND HALF

*Examiner*—MR. H. D. GHOSH, M.A.

1. Discuss the reforms of Indian Railway Finance proposed by the Acworth Committee. Explain briefly why the Acworth Committee could not agree with the Inchcape Committee on this question, and describe the financial obligations of the State Railways under the new system now in force.

2. Write a short review of the Branch line railway systems of India, specially from the view-points of management, finance, and economic value.

3. Discuss the main features of the Divisional system of Organisation of railways. Explain briefly the chief differences between the Divisional and Departmental systems of Organisation and the reason why the Government of India (Railway Board) are now so much in favour of introducing the Divisional system on Indian railways.

4. What are Schedule rates? How do you account for a number of schedule rates on Indian railways with different schedules of charges? Discuss the problem of Equal-mileage and Telescopic scales of charges, and examine the question of introducing Continuous mileage rates on Indian railways from Railway and public points of view.

5. What do you understand by the terms : Depreciation Fund, Net Revenue receipts, Railway reserve, Operating ratio, Density of Traffic, Route miles, Engine hours, Light-engine miles, Vehicle miles, Passenger miles, Gross Train load, and Net Train load?

## (ECONOMIC HISTORY)

*The questions are of equal value**Answer any THREE from EACH half*

## FIRST HALF

*Examiner*—MR. BEJOYKUMAR SARKAR, A.B.

1. Trace the circumstances which led to the Repeal of the English Corn Laws.

2. Give a brief account of the Syndicalist Movement in France. What has been its influence on the Labour Movement in England and Germany?

3. Describe the part played by the Banks in Japan in the development of her industry and agriculture.

4. Give a short account of the evolution of Factory Legislation in India.

5. Write a short account of the foreign trade of India since the outbreak of the last European War, indicating the change it has undergone in its character and distribution.

## SECOND HALF

*Examiner*—MR. ROHINIMOHAN CHAUDHURI, M.A.

1. Give an account of the agrarian revolution in Great Britain in the beginning of the nineteenth century. What are the circumstances that led to the decline of British agriculture since 1875?

2. Trace the circumstances that led to the growth of the free trade movement in Great Britain. Account for the rise of protectionist reaction in recent years.

3. Indicate briefly the influence of the fiscal policy upon the growth of French industries in the latter half of the nineteenth century.
4. Trace the growth of industrial combinations in Germany. How far have such combinations contributed to the industrial efficiency of the country?
5. Indicate the steps that have been taken by Government in recent years for the development of industries in India. Do you consider these steps adequate?

### (AGRICULTURAL ECONOMICS)

*The questions are of equal value*

*Answer THREE questions from EACH half*

#### FIRST HALF

*Examiner*—PROF. N. GANGULI, C.I.E., PH.D.

1. Discuss the main causes of Agricultural Indebtedness in India, with special reference to Bengal.
2. Discuss the chief remedies suggested to work off the indebtedness of agriculturists and state what you consider to be the merits and demerits of each.
3. Discuss the ways of economising land that a nation has.
4. 'In the minds of certain social reformers, known as "single-taxers," the rent of the land is not earned by the landowners.' Elucidate the proposition.
5. Draw up a brief outline of the points to be looked into in a scheme of rural reconstruction and state which of your recommendations are specially suited to the conditions of Bengal.
6. What have been the main achievements of the Co-operative movement in India? Wherein has it mainly failed, if it has failed anywhere?

#### SECOND HALF

*Examiner*—RAI BAHADUR BIJAYBIHARI MUKHERJEE.

7. Take out three of what you consider to be the most important recommendations of the Agricultural Commission of 1928 and state your views for or against them.
8. In what circumstances can rural industries hold their own against factory work? Discuss two such industries of India.
9. Enumerate the causes that stand in the way of immediate consolidation of holdings in India.  
Suppose a legislative measure is to be undertaken insisting on consolidation, what are the difficulties to be met with in the existing circumstances of the country? How can they be met?
10. What are the advantages and disadvantages of small farming compared with large-scale agriculture?

# M.A. & M.Sc. Examinations, 1931

## PURE MATHEMATICS

### FIRST PAPER

Examiners— $\left\{ \begin{array}{l} \text{Mr. PRAMATHANATH MITRA, M.A.} \\ \text{, MANORANJAN GUPTA, M.Sc.} \end{array} \right.$

*The questions are of equal value.*

*Six questions only are to be attempted.*

1. (a) If  $s = a_1 + a_2 + a_3 + \dots + a_n$ ,

shew that 
$$\prod_{r=1}^n \left( \frac{s}{a_r} - 1 \right)^{a_r} > (n-1)^s.$$

- (b) Shew that

$$\lim_{n \rightarrow \infty} \sum_{r=1}^n \left\{ \frac{a+r}{n} \right\}^n \text{ lies between } e^a \text{ and } e^{a+1}.$$

2. (a) Examine for convergence the series

(1)  $\sum \{1/1^a + 1/2^a + 1/3^a + \dots + 1/n^a\}/n^a.$

(2)  $\sum 1/n \ln l^2 n \dots l^{r-1} n. \{l^r n\}^a,$

where  $\ln, l^2 n, \dots$  represent respectively  $\log n, \log (\log n) \dots$

- (b) Sum the series

$$\frac{1^3}{1!}x + \frac{1^3+2^3}{2!}x^2 + \dots + \frac{1^3+2^3+\dots+n^3}{n!}x^n + \dots \text{ to infinity.}$$

3. (a) Shew that every recurring continued fraction, pure or mixed, is equal to a simple quadratic surd.

- (b) If the partial quotients of a simple continued fraction  $x_1 = \frac{p_1}{q_1}$  form a

reciprocal series (i.e., a series in which the terms equidistant from the beginning and the end are equal), then  $p_{n-1} = q_n$ , and  $(q_{n+1} + 1)/p_n$  is an integer; and conversely, if these conditions be satisfied, the quotients will form a reciprocal series. Prove these.

4. Establish the formula

$$\cot z = \frac{1}{z} + 2z \sum_{n=1}^{\infty} \frac{1}{z^2 - r^2 \pi^2},$$

and deduce that 
$$\sum_{n=-\infty}^{\infty} \frac{1}{(n\pi + \theta)^2} = \operatorname{cosec}^2 \theta.$$

Also sum the series

$$1 - \frac{1}{2} + \frac{1}{8} - \frac{1}{16} + \frac{1}{32} - \frac{1}{64} + \frac{1}{128} - \dots$$

5. If  $\rho_1, \rho_2, \dots, \rho_n$  are the distances of a point  $\rho$  in the plane of a regular polygon from the vertices, Prove that

$$\sum_{i=1}^n \frac{1}{\rho_i^2} = \frac{n}{r^2 - a^2} \cdot \frac{r^{2n} - a^{2n}}{r^{2n} - 2r^n a^n \cos n\theta + a^{2n}},$$

where  $a$  is the radius of the circle circumscribing the polygon,  $r$  the distance of  $P$  from the centre  $O$ , and  $\theta$  the angle which  $OP$  makes with the radius to any vertex of the polygon.

Evaluate  $\sum \frac{1}{\rho_i^2}$  for a regular hexagon when  $P$  lies at the middle point of one of its sides.

6. (a) If  $ABC$  be spherical triangle right-angled at  $C$ , shew that

$$\sin(A+B) = \frac{\cos a + \cos b}{1 + \cos a \cos b}.$$

(b) Two ports in the same parallel of latitude, their common latitude being  $l$  and their difference of longitude  $2\lambda$ ; shew that the saving of distance in sailing from one to the other on the great circle, instead of sailing due East or West, is

$$2r\{\lambda \cos l = \sin^{-1}(\sin \lambda \cos l)\},$$

$\lambda$  being expressed in circular measure, and  $r$  being the radius of the Earth.

7. (a) Shew that a biquadratic and its resolvent (Euler's) cubic have the same discriminant except for a numerical constant.

(b) Shew that if the resolvent cubic has a pair of imaginary roots, the biquadratic has a pair of real and a pair of imaginary roots.

(c) If the roots of a biquadratic represent the distances of four points on a right line measured from a fixed point on it, prove that when they form a harmonic range, the roots of Euler's cubic are in Arithmetic Progression.

8. Give an account of Lagrange's method of solving numerical equations by continued fractions, noting specially the case where several roots lie between two consecutive integers.

Hence express the positive roots of the equation

$$12x^3 - 29x^2 - 6x + 35 = 0$$

in the form of continued fractions.

9. (a) Transform the equation

$$x^6 - 2x^5 - 24x^4 + 56x^3 - 96x^2 - 32x + 64 = 0$$

into the standard reciprocal form and solve it completely.

(b) For the equation

$$x^n + P_1 x^{n-1} + P_2 x^{n-2} + \dots + P_{n-1} x + P_n = 0,$$

prove that

$$\frac{dS_r}{dP_r} = -(r+i)II_i,$$

where  $II_i$  represents the sum of the homogeneous products of the roots of  $i$  dimensions and  $S_r$  the sum of the  $r^{th}$  power of the roots,  $i$  and  $r$  being positive integers.

10. (a) Define a Skew Determinant and a Skew-Symmetric Determinant, and indicate how they differ.

Show that a Skew-Symmetric Determinant of even order is a perfect square.

(b) If  $\Delta_n$  represents the Determinant of the  $n^{\text{th}}$  order

$$\begin{vmatrix} \alpha, & 1, & 0, & 0, & 0, & \dots, & 0 \\ \beta, & \alpha, & 1, & 0, & 0, & \dots, & 0 \\ 0, & \beta, & \alpha, & 1, & 0, & \dots, & 0 \\ 0, & 0, & \beta, & \alpha, & 1, & \dots, & 0 \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ 0, & 0, & 0, & 0, & 0, & \beta, & \alpha \end{vmatrix}$$

prove that

$$\Delta_n = \alpha \Delta_{n-1} - \beta \Delta_{n-2}.$$

Hence, or otherwise, deduce that

$$\begin{aligned} \Delta_n = & \alpha^n - (n-1)\alpha^{n-2}\beta + \frac{(n-3)(n-2)}{1.2} \alpha^{n-4}\beta^2 \\ & - \frac{(n-5)(n-4)(n-3)}{1.2.3} \alpha^{n-6}\beta^3 + \dots \end{aligned}$$

## SECOND PAPER

Examiners—{ Mr. SATISCHANDRA GHOSH, M.A.  
                  { „ P. GANGULI, M.A.

*The questions are of equal value.*

*N.B.—Attempt five questions only.*

1. (a) Given the base NS of a triangle NPS and also the sum of the cosines of the base angles SNP and NSP; let the curve locus of P be constructed. Prove that if a particle be placed at any point of the curve and

acted on by two forces, one repulsive from N and equal to  $\frac{\mu}{NP^2}$  and the other

attractive towards S and equal to  $\frac{\mu}{SP^2}$ , the resultant force is, at every position

of the particle, directed along the tangent to the curve.

(b) A frustrum of a solid right cone is placed with its base on a rough inclined plane, the inclination of which is gradually increased; determine the nature of the initial motion of the body.

2. (a) Find the centre of mass of a hemisphere in which the density is proportional to the  $n^{\text{th}}$  power of the distance from the centre.

(b) A uniform chain hangs over two smooth pegs in the same horizontal line, and at a given distance apart; find the length of the chain when the pressure on each peg is a minimum.

3. (a) Determine the laws of attraction for which the attraction of a uniform spherical shell on any external particle is the same as if the shell were condensed into an infinitely small particle at its centre.

(b) Given the whole mass of a solid, find its shape so that its attraction, in any direction, on a particle placed at a given point may be a maximum.

4. (a) Establish Laplace's Equation in polar co-ordinates for a point in space at which none of the attracting matter exists.

(b) Find the amount of work done in a material system self-attracting according to the Newtonian Law.

5. Determine that point in the axis of a hemispherical body, the particles of which attract inversely as the square of the distance where a corpuscle



must be placed so as to remain in equilibrium by the equal and contrary action of the matter of the hemisphere surrounding it.

6. Find the attraction of a thin circular plate of uniform thickness and density on a particle in its plane, the law of attraction being that of the inverse cube of the distance.

7. Find the components of velocity and acceleration of a particle referred to two-dimensional rectangular axes moving in any manner round the origin which is fixed.

If the axes  $Ox$ ,  $Oy$  revolve with constant angular velocity  $\omega$ , and the component velocities of the point  $(x, y)$  parallel to the axes : re

$$\frac{a^2 - b^2}{a^2 + b^2} \omega y, \frac{a^2 - b^2}{a^2 + b^2} \omega x,$$

prove that the point describes relatively to the axes an ellipse in the periodic time

$$\frac{\pi}{\omega} \cdot \frac{a^2 + b^2}{ab}.$$

8. A particle moves in a plane under the action of a given central force. Find the differential equation of its path.

A particle describes a circle with uniform angular velocity under a central force from the centre varying as the inverse  $n$ th power of the distance. Find the condition of the stability of this motion and the apsidal angle of a slightly disturbed orbit.

9. A particle is constrained to slide on a smooth curve which moves in any manner in its own plane. Find the equations of motion.

A particle is placed in a smooth straight tube which is suddenly set rotating with uniform angular velocity  $\omega$  about a point  $O$  in its plane which is at a perpendicular distance  $a$  from the tube; shew that the reaction between the particle and the tube at time  $t$  is  $ma\omega^2(2 \cosh \omega t - 1)$   $m$  being the mass of the particle and  $a$  its initial distance from  $O$ .

10. Define 'hodograph' and show how the equation of the hodograph can be found.

If the hodograph be a circle described with constant angular velocity about a point on its circumference show that the path is a cycloid.

11. On a wire in the form of a parabola, whose latusrectum is  $4a$  and whose axis is vertical and vertex downwards, is a bead attached to the focus by an elastic string of natural length  $\frac{1}{2}a$ , whose modulus is equal to the weight of the bead. Show that the time of a small oscillation is

$$2\pi \sqrt{\frac{a}{g}}.$$

### THIRD PAPER

Examiners—{ DR. SURENDRAMOHAH GANGULI, D.Sc.  
MR. M. GHOSH, M.Sc.

*The questions are of equal value.*

ANY SIX questions carry full marks.

1. Obtain the areal equation of a circle with respect to which the triangle of reference is self-conjugate and show that its centre is at the orthocentre of the triangle.

1. A system of conics is drawn passing to through the vertices of the triangle of reference and also through the centroid. Prove that the locus of their centres is a conic touching the sides of the triangle at their mid-points.

2. If  $\theta$  varies, prove that the point  $\{\sin(A+\theta), \sin(B+\theta), \sin(C+\theta)\}$  describes a straight line. In the *trilinear* system, what are the points corresponding to  $\theta=0^\circ, \pm 60^\circ, 90^\circ$ ?

Investigate the condition that a conic may be a rectangular hyperbola, and hence, or directly, prove that every conic through the *in*- and *ex*-centres of a triangle is a rectangular hyperbola.

3. With a given point  $O$  as centre a family of circles is drawn to cut a conic. Shew that the locus of the middle points of the chords of intersection is a rectangular hyperbola whose asymptotes are parallel to the axes of the conic and which passes through  $O$  and the centre of the conic.

4. Prove that the *cross-ratio* of the pencil formed by the four lines  $y=m_1x, y=m_2x, y=m_3x, y=m_4x$  is

$$\frac{(m_1 - m_2)(m_3 - m_4)}{(m_1 - m_4)(m_3 - m_2)},$$

and show that this remains unchanged by the interchange of any two lines, provided that the other two are also interchanged.

Prove that one of the cross-ratios of the pencil formed by joining any point on an ellipse to the extremities of the latera recta is  $e$ .

5. Extend Plucker's definition of focus to a curve of any order and establish the following :—

(1) The coaxial family of circles through two foci of a curve have two other foci as limiting points.

(2) If four foci of a curve are concyclic, the curve has three other sets of four concyclic foci.

6. Establish Desargue's Theorem, namely, a straight line is cut in involution by a pencil of conics through four fixed points.

Apply the principles of projection to deduce that a system of coaxial circles is cut by a transversal in an evolution of which the double points are the points of contact of the circles of the system which touch the line.

State the reciprocal theorem.

7. Find the *joint-invariants* of two conics and examine the geometrical significance of the equations  $\Theta=0$  and  $\Theta'=0$ .

If two triangles are self-conjugate with regard to any conic  $S'$  show that a conic can be described passing through their six vertices and another touching their six sides.

8. Show that the second polar of a point  $P$  on the Steinerian touches the Hessian at the *corresponding* point  $Q$ , and that the common tangent is the harmonic conjugate of  $PQ$  with respect to the tangents to the first polar of  $P$  at  $Q$ .

State the corresponding theorem in the case of a cubic curve.

Hence, or otherwise, prove that the tangents to the Hessian at two conjugate poles  $P, Q$  intersect on the Hessian at the point conjugate to the third point in which  $PQ$  intersects the Hessian again.

9. Show that by a proper choice of homogeneous co-ordinates the equation of a crunodal cubic can be reduced to the form  $(y^2 - 3x^2)z = x^3$ .

Prove that the points of contact of tangents drawn from any point on  $3x=2a$  to a circle  $a(x^2 - y^2) = x^3$  lie on a circle the origin and that the centre of this circle lies on a fixed straight line.

10 Give a rough sketch of the curve  $x^3 + y^3 = 3axy$  and show that the curve possesses three inflexions all lying at infinity and that the real asymptote makes an angle of  $45^\circ$  with each nodal tangent.

Shew that every crunodal cubic can be projected into the above curve.

11. Obtain the equation of a trinodal quartic with nodes at the vertices of the triangle of references.

Show that the six intersections of the tangents at a node with the line joining the other two nodes lie on a conic and the six intersections of the tangents drawn from a node with the line joining the other two nodes lie on a second conic having double contact with the first.

12. Define a *bicircular quartic* and obtain its Cartesian equation.

Establish the following :—

- (1) A bicircular quartic has sixteen foci lying by fours on four circles.
- (2) The sixteen cycle points lie by fours on four circles.

#### FOURTH PAPER

Examiners—{ DR. HARIDAS BAGCHI, M.A., PH.D.  
,, S. N. GANGULI, D.Sc.

*The questions are of equal value.*

*Candidates are required to answer SIX questions only.*

1. Show that there are four effective constants in the general equation of a straight line in space and hence affirm the existence of a single infinity of straight lines cutting three given curves.

A straight line moves so as to intersect the line  $z=0, x=y$ ; and the circles  $x=0, y^2+z^2=r^2$ ;  $y=0, z^2+x^2=r^2$ . Prove that the equation to its locus is

$$(x+y)^2 \{ z^2 + (x-y)^2 \} = r^2 (x-y)^2.$$

Discuss the nature of the section of this surface by the plane  $x-y=0$ .

2. (a) Find the condition that the general equation of the second degree, viz.,

$$ax^2 + by^2 + cz^2 + 2fyz + 2gzx + 2hxy + 2ux + 2vy + 2wz + d = 0$$

may define a cone, and consider the additional limitations under which the cone may admit of triads of orthogonal tangent planes.

(b) Construct the equation of the enveloping cone ( $\Sigma$ ) of a point  $P(x_1, y_1, z_1)$  with respect to the ellipsoid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1.$$

Verify that the locus of  $P$  is a sphere or a quadric cone according as  $\Sigma$  is provided with triads of orthogonal tangent planes or is composed of two planes.

3. Investigate the conditions for the conicoid

$$ax^2 + by^2 + cz^2 + 2fyz + 2gzx + 2hxy + 2ux + 2vy + 2wz + d = 0$$

to be (i) a paraboloid,

(ii) a surface of revolution.

By way of illustration identify the quadric

$$x^2 + y^2 + z^2 - yz - zx - xy - 3x - 6y - 9z + 21 = 0$$

as a paraboloid of revolution and find the direction of its axis.

4. (a) Prove that the section of the quadric

$$ax^2 + by^2 + cz^2 + 2fyz + 2gzx + 2hxy = 1$$

by the plane  $lx + my + nz = 0$  will be a circle if

$$\frac{bn^2 + cm^2 - 2fmn}{m^2 + n^2} = \frac{cl^2 + an^2 - 2gnl}{n^2 + l^2} = \frac{am^2 + bl^2 - 2hlm}{l^2 + m^2}.$$

(b) Ascertain the equation of the tangent plane ( $\Sigma$ ) at an arbitrary point  $(u, \theta)$  of the cylindroid ( $II$ )

$$x = u \cos \theta,$$

$$y = u \sin \theta,$$

$$z = c \sin 2\theta,$$

and satisfy yourself that the section of  $II$  by  $\Sigma$  consists of a straight line and an ellipse whose projection on the plane  $z=0$  is the circle

$$(x^2 + y^2) \cos 2\theta - u(x \cos \theta - y \sin \theta) = 0.$$

5. Calculate the angle of intersection  $\theta$  of the two generators which pass through an assigned point  $P$  of the hyperboloid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1$$

and deduce therefrom or prove independently that as  $\theta$  is restricted to be 0 or  $\frac{\pi}{2}$ , the curve locus of  $P$  is a plane curve or a sphero-conic.

Establish the proposition that there are four (imaginary) positions of  $P$ , for each of which the two associated generators are both co-directional and orthogonal.

Hence prove that the eight generators attached to the above four special positions of  $P$ , contain all the umbilics of the surface.

6. Work out the Cartesian equation of the osculating plane at an arbitrary point of a curve, whose parametric equations are given. It is possible to find a point of the osculating plane at which has four-pointic contact with the curve? If so, how?

Characterise (in a general way) some of the salient features of the quartic curve

$$x = t,$$

$$y = t^2,$$

$$z = t^3,$$

and make sure that there exists one and only one plane of four-pointic contact. Locate this plain along with its point of contact.

7. Substantiate the nine Frenet-Serret formulæ bearing on the theory of curves in space.

Prove that the criterion for a spherical curve is that the relation

$$\frac{\rho}{\sigma} + \frac{d}{ds} \left( \sigma \frac{d\rho}{ds} \right) = 0$$

should hold at every point on the curve.

8. Derive the differential equations of the lines of curvature of a surface in the form

$$\begin{vmatrix} Edp + Fdq & Fdp + Gdq \\ Ldp + Mdq & Mdp + Ndq \end{vmatrix} = 0,$$

Prove that the surface defined by

$$\frac{x}{a} = \frac{p+q}{2},$$

$$\frac{y}{b} = \frac{p-q}{2},$$

$$z = \frac{pq}{2},$$

is a hyperbolic paraboloid of which the asymptotic lines are

$$p = \text{const.},$$

$$q = \text{const.},$$

and the lines of curvature are

$$\sinh^{-1} \frac{p}{c} \pm \sinh^{-1} \frac{q}{c} = \text{const.},$$

where  $c^2 = a^2 + b^2$ .

9. Define the *specific curvature* at a point on a surface, and demonstrate clearly that its value depends solely on the fundamental magnitudes of the first order, viz.,  $E, F, G$  and their derivatives.

For a surface given by

$$ds^2 = a^2 (dp^2 + \sinh^2 p \cdot dq^2),$$

establish the constancy of the Gaussian curvature.

10. Adopting the usual notation, prove that if the family of curves

$$\phi(p, q) = \text{const.}$$

be geodesic parallels, a sufficient condition is that  $\phi$  should be a primitive of the partial differential equation

$$\Delta \phi = \frac{E\phi_2^2 - 2F\phi_1\phi_2 + G\phi_1^2}{V^2} = 1.$$

If the arc element of a surface be of the form

$$ds^2 = (p^2 - q^2 + 1)(dp^2 + dq^2) - 2(p^2 - q^2 - 1)dpdq,$$

prove that a system of geodesic parallels is given by

$$p + q = \text{const.}$$

## FIFTH PAPER

Examiners—{ MR. HARIPRASANNA BANERJEE, M.Sc.  
,, S. C. GHOSH, M.A.

*The questions are of equal value.*

*Full marks for ANY SIX questions.*

1. (a) Apply Cauchy's Theorem to obtain a proof of the legitimacy, under certain conditions, of the well-known method of evaluating limits which appear in the indeterminate form  $\frac{0}{0}$ . State carefully the conditions which you suppose to be satisfied.

(b) The function  $f(x)$  is defined to be equal to 0 for

$$x=0, \pm 1, \pm \frac{1}{2}, \pm \frac{1}{3}, \pm \frac{1}{4},$$

and to be equal to

$$x \sin \left( \frac{\pi}{x} \right) \sin \left\{ \frac{\pi}{\sin \left( \frac{\pi}{x} \right)} \right\}$$

for all other values of  $x$ . Show that  $f(x)$  is everywhere continuous, but does not possess a differential coefficient at an infinite number of points in the vicinity of the origin.

2. (a) Discuss the expansibility of

$$x^2 + e^{-(x-x_0)^{-2}} \sin (x-x_0)^{-1}$$

in powers of  $x-x_0$  in the neighbourhood of  $x_0$ . Do the second and higher differential coefficients of this function exist at  $x_0$ ? Give full reasons.

(b) If  $f(x, y)$  be a function of the two variables  $x$  and  $y$ , show that  $f_{xy} = f_{yx}$ , provided that these two derivatives are continuous.

Show by an example that, if the above condition is not satisfied, the partial differential coefficients  $f_{xy}$ ,  $f_{yx}$  might both exist at some point and yet they may have different values there.

3. Given that  $z = x + y\phi(z)$ , show how the various coefficients in the expansion of  $F(z)$  in ascending powers of  $y$  can be obtained.

Find the first five terms in the expansion of one of the roots of the cubic

$$z^3 - az + b = 0$$

in ascending powers of  $b$ .

4. (a) If

$$u_1 = x_1(1 - x_1^2 - x_2^2 - \dots - x_n^2)^{-\frac{1}{2}}, \dots,$$

$$u_n = x_n(1 - x_1^2 - x_2^2 - \dots - x_n^2)^{-\frac{1}{2}},$$

show that the functional determinant

$$\frac{D(u_1, u_2, \dots, u_n)}{D(x_1, x_2, \dots, x_n)} = (1 - x_1^2 - x_2^2 - \dots - x_n^2)^{-1 - \frac{1}{2}n}.$$

(b) If  $x = e^v \sec u$ ,  $y = e^v \tan u$ ,

and  $\phi$  is a function of  $x$  and  $y$  show that

$$\cos u \left( \frac{\partial^2 \phi}{\partial u \partial v} - \frac{\partial \phi}{\partial u} \right) = xy \left( \frac{\partial^2 \phi}{\partial x^2} + \frac{\partial^2 \phi}{\partial y^2} \right) + (x^2 + y^2) \frac{\partial^2 \phi}{\partial x \partial y}.$$

5. Explain the method of Lagrangian Multipliers in the determination of the maxima and minima of a function of several independent variables connected by certain given relations.

Find the maximum and minimum radii vectors of the section of

$$(x^2 + y^2 + z^2)^2 = a^2 x^2 + b^2 y^2 + c^2 z^2$$

by

$$lx + my + nz = 0.$$

6. (a) State and prove Darboux's theorem on Integration and point out its importance in the theory of Riemann Integration.

(b) If  $f(x) = 1$ , for all values of  $x$  in the interval  $(0, 1)$  except for

$x = \frac{1}{2^n}$ , ( $n = 1, 2, 3, \dots$ ) for which  $f(x) = 0$ , show that  $f(x)$  is integrable in the sense of Riemann in  $(0, 1)$ .

7. (a) State and prove the first law of the mean for Integrals and deduce the fundamental theorem of the Integral Calculus.

(b) Find out whether the fundamental theorem is valid at the origin for the function

$$y = \cos \frac{1}{x}, \text{ for } x \neq 0,$$

$$y = 0, \text{ for } x = 0.$$

8. (a) Test for convergence the integral

$$\int_0^{\infty} x^{a-1} e^{-x} dx,$$

and determine its value when  $a > 1$ .

(b) With the usual notation, prove carefully that

$$B(m, n) = \frac{\Gamma(m) \Gamma(n)}{\Gamma(m+n)}.$$

9. (a) Obtain the value of

$$\iiint x^{\alpha} y^{\beta} z^{\gamma} (1-x-y-z)^{\delta} dx dy dz$$

over the interior of the tetrahedron formed by the co-ordinate planes and the plane  $lx + my + nz = 1$ .

(b) Prove that the area of the portion of the sphere  $x^2 + y^2 + (z-c)^2 = c^2$  contained within the paraboloid

$$2z = \frac{x^2}{a^2} + \frac{y^2}{b^2} \text{ is } 4\pi c \sqrt{ab}.$$

10. (a) Show that differentiation under the integral sign is allowable in the integral

$$\int_0^{\infty} \frac{dx}{x^2 + a}, a > 0$$

and hence show that the integral  $= \frac{\pi}{2\sqrt{a}}$ .

(b) State (without proof) the conditions which must hold in order that a function may be expansible in a Fourier series. Obtain the Fourier series for the function  $x + x^2$  in the interval  $-\pi < x < \pi$ .

### SIXTH PAPER

Examiners—{ MR. NARENDRAKUMAR MAJUMDAR, M.A.  
,, H. P. BANERJEE, M.Sc.

*The questions are of equal value.*

*You are required to attempt the THIRD and the SEVENTH questions; full marks may be obtained by answering these and any FOUR of the remaining questions.*

1. (a) What is the criterion that two differential equations should have a common primitive?

(b) Prove that the following equations satisfy the test for the existence of a common primitive, and determine such common primitive :—

$$y - xp = a(y^2 + p),$$

$$y - xp = b(1 + x^2 p); \quad \left( p \equiv \frac{dy}{dx} \right).$$

(c) Show that the primitive of the differential equation

$$(2x^2 + 1)p^3 + (x^3 + 2xy + y^3 + 2)p + (2y^3 + 1) = 0$$

is  $c^3 + c(x + y) + 1 - xy = 0$ . Obtain the singular solution and explain the significance of the irrelevant factors that present themselves.

2. Solve any three of the following equations :—

(a)  $(D + C)^n y = \cos ax$ .

(b)  $x^4 \frac{d^4 y}{dx^4} + 6x^3 \frac{d^3 y}{dx^3} + 4x^2 \frac{d^2 y}{dx^2} - 2x \frac{dy}{dx} - 4y = x^3 + 2 \cos(\log x)$ .

(c)  $\frac{d^2 y}{dx^2} - 2y = 4x^2 e^{x^2}$ .

(d)  $\frac{d^2 y}{dx^2} + x \frac{dy}{dx} - y = (2 + x^2 - x \cot x) \operatorname{cosec} x$ .

3. Solve any three of the following :—

(i)  $\frac{d^2 y}{dx^2} + \cot y + 1 - \left( \frac{dy}{dx} \right)^2 = 0$ .

(ii)  $\left( \frac{dy}{dx} + y^2 \right) \sin x + 2y(1 - xy) \cos x = 0$ .

(iii)  $x^4 \frac{d^2 y}{dx^2} = Ay$ ,  $A$  being any constant.

(iv)  $x(y^2 + z)p - y(x^2 + z)q = z(x^2 - y^2)$ .

4. (a) Solve the equation :—

$$(y^2 + yz)dx + (xz + z^2)dy + (y^2 - xy)dz = 0.$$

(b) Obtain a solution of the equation

$$a(b - c)x dy dz + b(c - a)y dz dx + c(a - b)z dx dy = 0$$

consistent with the equation

$$ax^2 + by^2 + cz^2 = 1.$$

Interpret geometrically.

5. Find the general integral of

$$y^2 q = (p - 1)(pxy - p + 1)$$

and determine whether it includes the solution

$$z = x - y + 2\sqrt{1 - xy}.$$

6. (a) By the principle of duality or otherwise, solve the equation

$$p^2 r + 2pq s + q^2 t = (xp + yq)(rt - s^2).$$

(b) Solve the equation :—

$$x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} = (x^3 + y^3)^{\frac{2}{3}}.$$



7. Defining  $P_n(\mu)$  as that solution of the differential equation

$$(1-\mu^2) \frac{d^2 y}{d\mu^2} - 2\mu \frac{dy}{d\mu} + n(n+1)y = 0,$$

which equals 1 when  $\mu=1$ , prove that

$$P_n(\mu) = \frac{1}{2^n n!} \frac{d^n}{d\mu^n} (\mu^2 - 1)^n.$$

Hence, or otherwise, prove that all the roots of

$$P_n(\mu) = 0$$

are real and different and lie between  $-1$  and  $+1$ .

8. Establish the orthogonal property of  $P_n$ , viz., that

$$\int_{-1}^1 P_m(\mu) P_n(\mu) d\mu = 0, \text{ if } m \neq n.$$

Prove that

$$\begin{aligned} \frac{8}{\pi} \sin^{-1} x = & 3P_1(x) + 7 \cdot \left(\frac{1}{4}\right)^2 \cdot P_3(x) + 11 \cdot \left(\frac{1 \cdot 3}{4 \cdot 6}\right)^2 P_5(x) + \dots \\ & + (4m+3) \cdot \left\{ \frac{1 \cdot 3 \dots (2m-1)}{4 \cdot 6 \dots (2m+2)} \right\}^2 P_{2m+1}(x) + \dots \end{aligned}$$

9. Define  $Q_n(\mu)$ ; use your definition to prove that, when  $\mu > 2$ ,

$$Q_n(\mu) = \frac{n!}{3 \cdot 5 \cdot 7 \dots (2n+1)} \mu^{-n-1} F\left(\frac{n+1}{2}, \frac{n+2}{2}, \frac{3}{2} + n, \frac{1}{\mu^2}\right).$$

10. Prove any two of the following :—

$$(i) \frac{dP_n}{d\mu} = (2n-1)P_{n-1} + (2n-5)P_{n-3} + (2n-9)P_{n-5} + \dots$$

$$(ii) Q_n(\mu) = \int_0^\infty \frac{d\psi}{\{\mu + \sqrt{\mu^2 - 1} \cosh \psi\}^{n+1}}.$$

$$(iii) P_n(\cos \theta) = F\left(n+1, -n, 1, \sin^2 \frac{\theta}{2}\right).$$

$$(iv) |P_{n+1}(\cos \theta) - P_{n-1}(\cos \theta)| < \frac{C}{\sqrt{n+1}}, \text{ for } 0 \leq \theta \leq \pi,$$

where  $C$  is a positive quantity independent of  $n$ .

11. Define  $P_n^m(\mu)$ .

Prove that

$$P_n\{\cos \theta \cos \theta' + \sin \theta \sin \theta' \cos(\phi - \phi')\} = P_n(\cos \theta) P_n(\cos \theta')$$

$$+ 2 \sum_{m=1}^{n-1} \frac{(n-m)!}{(n+m)!} P_n^m(\cos \theta) P_n^m(\cos \theta') \cdot \cos m(\phi - \phi').$$

12. (a) Apply the method of Gauss and Prasad to expand  $x^2 + y^2 + z^2 + 4x^2(y^2 + z^2) + 4y^2(z^2 + x^2) + 4z^2(x^2 + y^2)$  in surface harmonics,  $x, y, z$  being the co-ordinates of a point on the unit sphere.

(b) Prove that, for  $m \leq n-1$ ,

$$(n-m+1)P_{n+1}^m(\mu) - (2n+1)\mu P_n^m(\mu) + (n+m)P_{n-1}^m(\mu) = 0.$$

## SEVENTH PAPER

(THEORY OF FUNCTIONS OF A REAL VARIABLE—FIRST PAPER)

Examiners—{ MR. MANORANJAN GUPTA, M.Sc.  
 PROF. GANESH PRASAD, D.Sc.

[N.B.—You are required to attempt the SEVENTH and EIGHTH questions. Full marks may be obtained by answering these questions and ANY FOUR of the remaining questions.]

1. Discuss briefly the advantages and disadvantages of Dedekind's and Cantor's theory of irrational numbers, and establish the equivalence of their definitions of irrational numbers.

2. Explain how a set of the first species can be decomposed into a finite number of isolated sets. Examine whether the same is possible when the set is (i) enumerable, (ii) of the first category, (iii) of the second species.

Is a set of the second species everywhere dense? Give examples in support of your answer.

3.  $P$  is a point of a non-dense perfect set defined in  $(a, b)$ . Shew that  $P$  is a limiting point either on one or on both sides. To which of these two types do the end-points  $a$  and  $b$  belong? How do you modify these results when the perfect set is everywhere dense?

Specify a point in Cantor's non-dense perfect set, which is a limiting point on both sides.

4. How do you define the measure of a given set  $E$ ? If  $E_1$  and  $E_2$  are two measurable sets, shew that the set  $M(E_1, E_2)$  is also measurable. Employ this result to prove the more general theorem.

If  $E_1, E_2, \dots, E_n, \dots$  be an enumerable infinity of measurable sets, then will the set  $M(E_1, E_2, \dots, E_n, \dots)$  be also measurable?

5. Construct the following :—

(i) A set of the first species whose  $n^{\text{th}}$  derivate consists of  $n$  different points. (A numerical example should be given.)

(ii) A set of the first category which is non-enumerable and everywhere dense.

(iii) A non-dense set whose measure is  $\frac{1}{2}$ .

6. Starting from the definition of a continuous function, prove that if  $f(x)$  is continuous at every point of a closed interval  $(a, b)$ , then  $(a, b)$  can be divided into a finite number of pieces in each of which the oscillation of  $f$  does not exceed an arbitrary assigned positive number  $\epsilon$ . A function  $f(x)$  is defined by

$$f(0) = 0; f(x) = x \sin \frac{1}{x}, (x \neq 0).$$

Prove that  $f(x)$  is continuous in  $(-1, 1)$ . Find an upper bound for the absolute value of  $f'(x)$  in  $\frac{1}{2} \leq x \leq 1$ , and hence (or otherwise) shew that the number of pieces in the division described above need not exceed  $4\epsilon^{-2} + 2$ .

7. Find the four derivatives of

$$\frac{x}{\sqrt{2}} \cos \left( \frac{1}{12} \log \frac{1}{x^2} + \frac{\pi}{4} \right)$$

at  $(0, 0)$ , and show that the derivatives on the right and those on the left are the same.

Prove carefully the following generalization of the mean-value theorem :  
If in a given interval  $(a, b)$  a function  $f(x)$  is defined to be finite and continuous, the end-points being included, then, for every pair of points  $(x_0, x_0 + h)$  of  $(a, b)$ , the end points being included,

$$f(x_0 + h) = f(x_0) + hf'(x_0 + \theta h), 0 < \theta < 1,$$

provided that at every point inside  $(a, b)$ , the ends being excluded, there is no distinction of right and left with respect to the four derivatives at that point so that

$$D^+f(x) = D^-f(x) \text{ and } D_+f(x) = D_-f(x).$$

8. Establish any two of the following properties of the function

$$f(x) = \sum_{n=0}^{\infty} \frac{1}{2^n} \cos(13^n \pi x) : -$$

(i)  $f(x)$  has no differential coefficient, finite or infinite, for any value of  $x$ ;

(ii)  $x = \frac{1}{13}$  is a limiting point of the zeros of  $f(x)$ ;

(iii) for every value of  $x$  of the form  $\frac{M}{13^m}$ ,  $M$  and  $m$  being positive integers,  $f'(x+0)$  and  $f'(x-0)$  are both numerically infinite but of opposite signs;

(iv) for every value of  $x$  of the form  $\frac{M+\frac{1}{2}}{13^m}$ ,

$$D^+f(x) = D^-f(x) = +\infty,$$

$$D_+f(x) = D_-f(x) = -\infty.$$

9. Prove the following :—

(a) A function of limited variation can have only discontinuities of the first kind.

(b) If a function is absolutely continuous in an interval then it is also of limited variation in that interval, but the converse is not true.

10. (a) Prove that, if the partial differential coefficients

$$\frac{\partial f}{\partial x}, \frac{\partial f}{\partial y}$$

exist at all points in the neighbourhood of  $(x_0, y_0)$  and

$$\frac{\partial}{\partial y} \left( \frac{\partial f}{\partial x} \right)$$

is continuous in  $(x, y)$  at  $(x_0, y_0)$

$$\frac{\partial}{\partial y} \left( \frac{\partial f}{\partial x} \right) = \frac{\partial}{\partial x} \left( \frac{\partial f}{\partial y} \right).$$

(b) Prove any one of the following :—

(i) At  $(0, 0)$  both the mixed differential coefficients of the second order of

$$\int_0^1 du \int_0^1 \cos \left\{ \left( \log \frac{1}{t^2} \right) \log \left( \frac{1}{u^2} \right) \right\} dt$$

exist and equal zero;

(ii) at (0, 0) both the mixed differential coefficients of the second order of

$$\int_0^y du \int_0^x \cos \left\{ \log \left( \log \frac{1}{t^2} + \log \frac{1}{u^2} \right) \right\} dt$$

are non-existent.

## EIGHTH PAPER

(THEORY OF FUNCTIONS OF A REAL VARIABLE—SECOND PAPER)

Examiners—{ Mr. H. P. BANERJEE, M.Sc.  
Dr. LAKSHMINARAYAN CHATTERJEE, M.A., D.Sc.

*The questions are of equal value.*

*Full marks for ANY SIX questions.*

1. (a) If  $\eta_1, \eta_2, \eta_3, \dots$  be an enumerable set of non-overlapping intervals contained in  $(a, b)$  in descending order of length, and  $f(x)$  be a function of  $(x)$  integrable  $(R)$  in  $(a, b)$ , prove that the sum of the integrals of  $f(x)$  taken through  $\eta_1, \eta_2, \eta_3, \dots$  converges to a definite finite limit as  $n$  is indefinitely increased.

(b) If a sequence of functions  $\{f_n(x)\}$ , all integrable  $(R)$ , in the interval  $(a, b)$  converges uniformly in that interval to the bounded function  $f(x)$ , prove that  $f(x)$  is integrable  $(R)$ , and

$$\int_a^b f(x) dx = \lim_{n \rightarrow \infty} \int_a^b f_n(x) dx.$$

From this theorem deduce another giving sufficient conditions for term by term integrability of a series.

2. If  $f(x)$  be a summable function in the interval  $(a, b)$ , prove that the indefinite integral

$$\int_a^x f(x) dx$$

is continuous and is of total bounded variation in  $(a, b)$ . Moreover it possesses a differential coefficient  $f(x)$  almost everywhere in  $(a, b)$ .

3. (a) Distinguish between a double integral and a repeated integral.

In the rectangle bounded by  $x=0, x=1, y=0, y=1$ , a function  $f(x, y)$  is defined as follows :—

$f(x, y)=1$ , for all rational values of  $x$ ,

$f(x, y)=2y$ , for all irrational values of  $x$ .

Show that the repeated integral

$$\int_0^1 dx \int_0^1 f(x, y) dy$$

exists but the double integral

$$\int f(x, y) dx dy$$

does not exist.

(b) Explain what is meant by the double integral of a function  $f(x, y)$  over an infinite domain.

4. If  $(-R, R)$  be the interval of convergence of a powerseries  $\sum a_n x^n$  whose sum-function is  $S(x)$ , prove that

$$(i) \quad \sum \frac{d}{dx} a_n x^n = \frac{d}{dx} S(x).$$

$$(ii) \quad \sum \int_0^x a_n x^n dx = \int_0^x S(x) dx$$

in the interval  $(-R, R)$ .

5. Obtain Taylor's expansion of  $f(x, y)$  and state accurately the restrictions under which it holds true. Examine the function  $f(x, y) = \sqrt{|xy|}$  and ascertain if it is expansible in Taylor's series at  $(0, 0)$ .

6. Define simply-uniform convergence and frame an example of a series which converges simply uniformly in the interval  $(0, 1)$  and prove your statement.

If the functions  $u_1(x), u_2(x), u_3(x), \dots$  be all continuous at a point  $\xi$  of the domain  $E$ , but not necessarily elsewhere, show that the condition of simple uniform convergence of the series  $\sum u_n(x)$  in some neighbourhood of  $\xi$  is sufficient to ensure that the sum-function  $S(x)$  is continuous at  $\xi$ .

7. If  $F(y)$  be defined by the relation

$$F(y) = \int_{\phi_1(y)}^{\phi_2(y)} f(x, y) dx, \quad a \leq x \leq b, \quad c \leq y \leq d,$$

where  $\phi_1(y), \phi_2(y)$  are continuous and  $f(x, y)$  is continuous in  $(x, y)$  together, prove that  $F(y)$  is continuous.

Discuss the continuity of the integral

$$\int_y^{y^2} \frac{dx}{y^2 + x^2}, \quad y > 0.$$

8. For Fejér's continuous function whose Fourier series diverges at the origin, verify Fejér's theorem on summability  $(C, 1)$ .

9. Prove Hardy's theorem that if  $\sum u_n$  is summable  $(C, 1)$  and  $u_n = O\left(\frac{1}{n}\right)$ ,  $\sum u_n$  is convergent.

Hence show that the Fourier series converges within any interval for which the variation of  $f(x)$  is bounded.

10. Prove that if  $f(x)$  is summable

$$\lim_{\tau=0} \int_{-\pi}^{\pi} |f(u+\tau) - f(u)| du = 0.$$

Deduce Riemann-Lebesgue theorem that if  $f(x)$  is a summable function in  $(\alpha, \beta)$ ,  $\lim_{n=\infty} a_n = 0$ , and  $\lim_{n=\infty} b_n = 0$ , where  $a_n$  and  $b_n$  are the Fourier coefficients corresponding to  $f(x)$ .

11. Prove Parseval's theorem that, under certain conditions to be specified,

$$\int_{-\pi}^{\pi} \{f(x)\}^2 dx = \pi \left\{ \frac{1}{2} a_0^2 + \sum_{n=1}^{\infty} (a_n^2 + b_n^2) \right\},$$

where  $a_n$  and  $b_n$  are the Fourier coefficients of  $f(x)$ . Deduce that

$$\int_{-\pi}^{\pi} f(x)F(x)dx = \pi \left\{ \frac{1}{2} a_0 A_0 + \sum_{n=1}^{\infty} (a_n A_n + b_n B_n) \right\},$$

where  $A_n, B_n$  are the Fourier coefficients of  $F(x)$ .

12. (a) Give, without proof, a short account of the different sufficient conditions for summability  $(C, 0)$  of the Fourier series corresponding to a given function.

(b) Indicate, without proof, Prasad's line of work in connection with summability  $(C, 1)$  of functions having a discontinuity of the second kind.

## SEVENTH PAPER

### (GROUP B)

#### (THEORY OF FUNCTIONS OF A COMPLEX VARIABLE—

#### FIRST PAPER)

Examiners—{ DR. B. M. SEN. M.Sc., Ph.D.  
PROF. GANESH PRASAD, D.Sc.

[N.B. —The questions are of equal value. Full marks for ANY SIX questions.]

1. Show how to obtain by a geometrical construction on the Argand diagram (i) the product, (ii) the quotient of two given complex numbers.

Prove the following :—

(a)  $|z_1 + z_2|^2 + |z_1 - z_2|^2 = 2(|z_1|^2 + |z_2|^2).$

(b) If the points  $z_1, z_2, z_3$  are the vertices of an equilateral triangle,

$$z_1^2 + z_2^2 + z_3^2 = z_1 z_2 + z_2 z_3 + z_3 z_1.$$

2. What is meant by saying that a function  $f(z)$  is *holomorphic* in a given region  $D$ ?

Use of your answer to the above to prove that, if  $f(z)$  is equal to  $P(x, y) + iQ(x, y)$ ,  $P$  and  $Q$  being real functions, then, in order that  $f(z)$  be holomorphic in  $D$ , it is *necessary* that the equations

$$\frac{\partial P}{\partial x} = \frac{\partial Q}{\partial y}, \quad \frac{\partial P}{\partial y} = -\frac{\partial Q}{\partial x}$$

should hold at every point of  $D$ .

Discuss briefly the question of the validity of the above partial differential equations being sufficient for  $f(z)$  being holomorphic.

3. Give briefly (but carefully) an outline of each of the two proofs of Cauchy's fundamental integral theorem given by Goursat.

State (without proof) Morera's theorem.

4. Apply Contour integration to evaluate *any two* of the following :—

$$(i) \int_0^\infty e^{-x^2} \cos 2bx \, dx;$$

$$(ii) \int_0^\infty \frac{\cos mx \, dx}{1+x^2+x^4}, \quad m > 0;$$

$$(iii) \int_0^\infty \frac{\tan x}{x} \, dx;$$

$$(iv) \int_0^\infty \frac{x^2 dx}{x^3+x+1};$$

$$(v) \int_{-\infty}^\infty \frac{e^{ax} dx}{1+e^x}, \quad 0 < a < 1.$$

5. Explain the term *conformal representation*, and show that, if  $Z$  is an analytic function of  $z$  in a given domain, the angle between two curves in the plane of the variable  $z$  is equal to the angle between the corresponding curves in the plane of the variable  $Z$ .

Determine the area in the  $Z$ -plane which corresponds to the upper half of the  $z$ -plane when

$$Z = \frac{z^2 + a^2}{2z},$$

and show that the area enclosed by a circle passing through the points  $Z = \pm a$  corresponds to the area enclosed by the arcs of two orthogonal circles which pass through the points.

6. Prove that it is possible to construct, in the form of a product of primary factors (each having one singularity and at most one zero), a one-valued analytic function of  $z$ , which is finite for all finite values of  $z$ , and vanishes at assigned points  $z = a_n$ , which are either finite in number or such that

$$\lim_{n \rightarrow \infty} |a_n| = \infty.$$

A one-valued analytic function has as its zeros

$$0, \pm \omega, \pm 4\omega, \pm 9\omega, \dots \text{to infinity};$$

prove that the simplest function determined thereby can be expressed in the form

$$\sin \left\{ \pi \left( \frac{z}{\omega} \right)^2 \right\} \sin \left\{ i\pi \left( \frac{z}{\omega} \right)^{\frac{1}{2}} \right\}.$$

7. Prove that the function

$$f(z) \equiv \sum_{n=1}^{\infty} \frac{z^n}{n^n}$$

has the unit circle as its natural boundary, although  $f(z)$  and all its differential coefficients are existent and finite at every point of the circle.

8. State carefully (but without proof) Picard's theorem about a function having an essential singularity.

Prove that the equation

$$e^{\frac{1}{z}} = A, (A \neq 0)$$

has an infinite number of roots with absolute values less than  $\rho$ , however small  $\rho$  may be.

Consider the equation

$$\sin \frac{1}{z} = A_1$$

near  $z=0$  and state if  $A_1$  has any exceptional value.

9. Prove carefully that the increases in the amplitude of any function  $f(z)$  along any closed path is  $2\pi$  times the number of the roots of the equation  $f(z) = 0$  enclosed by the contour.

Find how many roots lie in each quadrant in the case of each of the equations

$$z^4 - 2z^3 + 4z + 12 = 0.$$

$$z^4 + 2z^3 - 4z + 12 = 0.$$

10. Prove that the series

$$\sum_{n=1}^{\infty} (1+n^2x^2)^{-1}(1+n^2x)^{-1}$$

converges for all real values of  $x$  but represents a function which cannot be expanded in positive powers of  $x$ .

Shew further that when  $x$  lies between 1 and  $\sqrt{2}$  the function can be expanded in powers of  $x$  and  $x^{-1}$ .

11. Prove that the relation

$$Z = \frac{1+iz}{i+z}$$

transforms part of the  $x$ -axis between the points  $z=1$  and  $z=-1$  into a semicircle passing through the points  $Z=1$  and  $Z=-1$ .

Find all the figures which can be obtained from the initially selected part of the  $x$ -axis by successive applications of the above transformation.



## EIGHTH PAPER

(THEORY OF FUNCTIONS OF A COMPLEX VARIABLE—SECOND  
PAPER*Examiner*—MR. HARIPRASANNA BANERJEE, M.Sc.*The questions are of equal value,**Full marks will be given for six questions.*

1. Explain what is meant by a Riemann surface. How are the branch points determined? Describe the Riemann surface appropriate to the relation

$$w = z^{\frac{1}{2}} + (z-1)^{-\frac{1}{2}},$$

and discuss fully the variations in  $w$  when the  $z$  point describes a path surrounding both the origin and  $z=1$ .

2. Investigate the manner in which the value of the integral

$$z = \int_c^w \frac{d\xi}{\sqrt{\xi(\xi^2-1)}}$$

depends upon the path of intergration in the plane. Justify carefully the statement that the relation defines  $w$  as a doubly periodic function of  $z$ . What are the values of the periods?

3. Define Legendre's complete elliptic integrals, and apply Landen's transformation to show that

$$F\left(k, \frac{\pi}{2}\right) = \frac{2}{1+k'} F\left(\frac{1-k'}{1+k'}, \frac{\pi}{2}\right).$$

Show that

$$\int_0^1 \frac{dx}{\sqrt{x(1-x)(3+x)}} = 4(2-\sqrt{3}) F\left(\frac{2-\sqrt{3}}{2+\sqrt{3}}, \frac{\pi}{2}\right).$$

4. Define the Jacobian Theta series, and state briefly their general functional character.

Prove that

$$\theta_3^2 \cdot \theta_3^2(z) = \theta_2^2 \cdot \theta_3^2(z) + \theta_4^2 \cdot \theta_4^2(z).$$

5. Explain how the elliptic functions are used to elucidate the properties of plane non-unicursal cubic curves.

Prove that the roots of the quintic equation

$$x^5 + ax + b = 0$$

are  $\wp(u_1), \wp(u_2), \dots, \wp(u_5)$ , where  $u_1, u_2, \dots, u_5$  are the five zeroes of the elliptic function

$$\wp(u) \wp'(u) - \frac{ia}{b^{\frac{1}{2}}} \wp(u) - 2ib^{\frac{1}{2}}.$$

6. Prove Jacobi's theorem that a single-valued analytic function cannot have more than two independent periods.

Deduce that such a function cannot have two independent periods whose ratio is real.

7. Prove that an elliptic function and its differential coefficient are connected by an algebraic relation.

Deduce that if the elliptic function  $f(u)$  is of the second order, with distinct poles,  $\{f'(u)\}^2$  is a quartic in  $f(u)$ , but if the poles are coincident, the quartic reduces to a cubic.

8. When is a function said to possess an algebraic addition theorem. Investigate the algebraic addition theorem for  $\wp(z)$ .

Show that every elliptic function has an algebraic addition theorem.

9. (a) With the usual notation establish the relation

$$w'\eta - w\eta' = i \frac{\pi}{2}.$$

(b) Show that

$$2\zeta(2u) + 2\eta + 2\eta' = \zeta(u) + \zeta(u+w) + \zeta(u+w') + \zeta(u+w+w').$$

10. (a) Prove that

$$\frac{\wp'(u+w_1)}{\wp'(u)} = - \left\{ \frac{\wp_1'(w_1) - \wp(w_1)}{\wp(u) - \wp(w_1)} \right\}^2.$$

(b) Express

$$\frac{1 + cn(u+v)cn(u-v)}{1 + dn(u+v)dn(u-v)}$$

as a function of  $sn^2 u$  and  $sn^2 v$ .

11. Distinguish between the three different kinds of Abelian integrals and explain what is meant by the periodicity-moduli of the integrals.

Show that the difference of any two values which such an integral can have is equal to the sum of integral multiples of its moduli. Show also that the integrals of the third kind have in addition other moduli.

## SEVENTH PAPER

### (THEORY OF NUMBERS—FIRST PAPER)

Examiner—DR. ABANIBHUSHAN DATTA, M.A., PH.D.

The questions are of equal value.

Full marks for ANY SIX questions.

1. Show that if the functions  $f(n)$  and  $F(n)$  be so related that

$$F(n) = \sum f(d),$$

where the summation extends to all divisors  $d$  of  $n$ ,

then (i)  $\sum_{r=1}^{\infty} F(r) = \sum_{r=1}^{\infty} f(r) \left[ \frac{n}{r} \right];$

and (ii)  $\sum_{n=1}^{\infty} \frac{F(n)}{n^k} = \zeta(k) \cdot \sum_{n=1}^{\infty} \frac{f(n)}{n^k};$

where  $[m]$  denotes the greatest integer contained in  $m$ , and  $\zeta(k)$  is Riemann's Zeta function.

2. A region  $D$  in the plane of  $xy$  is bounded by the lines  $x=1$ ,  $y=1$ ,  $xy=n$ . Prove that the number of points lying inside  $D$  or on its boundary, and having integral co-ordinates, is equal to each of the functions

$$(i) \left[ \frac{n}{1} \right] + \left[ \frac{n}{2} \right] + \dots;$$

$$(ii) d(1) + d(2) + \dots + d(n);$$

where  $d(m)$  is the number of divisors of  $m$ .

Prove that

$$\lim_{n \rightarrow \infty} \frac{d(1) + d(2) + \dots + d(n)}{n \log n} = 1.$$

3. Discuss the congruence  $x^2 \equiv a \pmod{n}$ , determining necessary and sufficient conditions for the existence of roots.

If  $n$  is the product of  $r$  odd primes, prove that the number of roots is either zero or  $2^r$ , and show how this result must be modified when  $n$  is even.

Solve completely

$$x^2 \equiv 13 \pmod{17^3}.$$

4. Show that if  $q$  and  $q'$  are prime to each other, and if  $p$  and  $p'$  run through complete sets of residues to moduli  $q$  and  $q'$  respectively, then  $pq' + p'q$  runs through a complete set of residues to modulus  $qq'$ .

Show also that if  $p$  and  $p'$  run through only the residues to moduli  $q$  and  $q'$  which are prime to  $q$  and  $q'$  respectively, then  $pq' + p'q$  runs through a similar set for the modulus  $qq'$ .

5. Prove that if  $p$  is an odd prime the roots of

$$x^{\frac{1}{2}(p-1)} \equiv 1 \pmod{p}$$

are quadratic residues of  $p$  and also of  $2p$ .

If  $q$  is any odd number not divisible by the (odd) prime  $p$ , and if  $m$  is the sum of the greatest integers contained in

$$\frac{q}{p}, \frac{2q}{p}, \dots, \frac{\frac{1}{2}(p-1)q}{p},$$

$$\text{then } q^{\frac{1}{2}(p-1)} \equiv (-1)^m \pmod{p}.$$

6. Prove that to every positive divisor  $t$  of  $\phi(p)$  there appertain  $\phi(t)$  integers with respect to the modulus  $p$ .

Show that

$$\phi(1) \frac{x}{1+x^2} - \phi(3) \frac{x^3}{1+x^6} + \phi(5) \frac{x^5}{1+x^{10}} - \dots \text{ad inf.} = \frac{x(1-x^2)}{(1+x^2)^2}.$$

7. If  $x^n - 1$  is divisible by  $n$  when  $x=n-1$  but not when  $x$  is a factor  $< n-1$  of  $(n-1)$ , then  $n$  is a prime. Prove this.

If  $p$  is a prime  $4n+1$ , show that  $(2n)!$  is a root of

$$x^2 \equiv -1 \pmod{p}.$$

If  $a$  is prime to  $M + H p_i^{n_i}$ , and  $a^M \equiv a \pmod{M}$ , and  $a$  belongs to the exponent  $e_i \pmod{p_i}$ , then

$$\frac{M}{p_i^{n_i}} \equiv 1 \pmod{e_i}, a^{p_i^{n_i}} \equiv a \pmod{p_i^{n_i}} \text{ for every } i.$$

8. Give a rigorous proof of Legendre's Law of Reciprocity.

Has the congruence  $x^2 \equiv 1135 \pmod{2311}$  roots?

9. Prove that  $-3$  is a quadratic residue of any prime  $p=3n+1$  and a non-residue of any odd prime  $3n+2$ . Hence find the primes of which  $+3$  is a quadratic residue.

Solve  $x^3 \equiv 9 \pmod{2^4 \cdot 13^2 \cdot 7^3}$ .

10. Solve by Gauss's method of exclusion

$$x^3 \equiv 14 \pmod{103}.$$

If  $\begin{pmatrix} \alpha & \beta \\ \gamma & \delta \end{pmatrix}$  is a proper automorph of  $(a, b, c)$ , show how to determine the values of  $\alpha, \beta, \gamma, \delta$ .

### EIGHTH PAPER

(THEORY OF NUMBERS—SECOND PAPER)

Examiners— $\begin{cases} \text{MR. MANORANJAN GUPTA, M.Sc.} \\ \text{PROF. A. WEIL, D.Sc.} \end{cases}$

*The questions are of equal value,*

[N.B.—Full marks for Questions 1 and 5 and ANY FOUR of the remaining questions.]

1 Express all solutions of the equation

$$t^2 - Du^2 = \sigma^2$$

in terms of its fundamental solution and shew how an infinity of solutions of the equation

$$ax^2 + 2bxy + cy^2 = m$$

can be deduced from a knowledge of one of them and of the solution of the Pell's equation  $t^2 - Du^2 = 1$ , where  $D = b^2 - ac$ .

2. Explain what you mean by the class of a given determinant  $D$ . Obtain the following formula

$$h = \sum_{n=1}^{\frac{1}{2}(P-1)} \binom{n}{P},$$

where  $h$  denotes the number of pro-primitive classes for the negative determinant  $D = -P \equiv 1 \pmod{4}$  and  $P$  contains no square factor. Work out the case for  $D = -15$ .

3. Shew that  $r^k$  is a root of the polynomial  $R(x)$  if  $r$  is a root, it being given that  $r = e^{\frac{2\pi i}{p}}$  and  $p$  is an odd prime and  $k$  any integer relatively prime to  $p$ . If, moreover, the polynomial  $R(x)$  is *irreducible*, shew that it reduces to the cyclotomic expression  $\frac{x^p - 1}{x - 1}$ .

Construct the equation whose roots are the Gauss's periods for any odd prime  $p$ .

4. Prove that two equivalent forms belong to the same genus.

If  $(a, b, c)$  is a pro-primitive form of determinant  $D \equiv 2 \pmod{8}$ , the odd integers primitively representable by it are all  $\equiv \pm 1 \pmod{8}$  or  $\equiv \pm 3 \pmod{8}$ . Prove this.

5. Obtain the period of the form  $(3, 1, -4)$  of determinant 13 and thence develop its principal root into a simple recurring continued fraction. Account for the peculiarity that in this case the number of partial quotients in the period of the continued fraction is half the number of forms in the period of  $(3, 1, -4)$ . State the necessary and sufficient condition in order that it may be so for a given determinant  $D$ .

6. When are two binary quadratic forms said to be adjacent? Shew that two such forms are properly equivalent. Point out their importance in the theory of equivalence of forms.

Obtain a *reduced* form equivalent to each of the forms  $(30, -53, 94)$ ,  $(-46, 29, -18)$ .

7. When is a form of positive determinant said to be *reduced*? Prove that two such forms belong to the same period if they are properly equivalent.

8. Determine the total number of possible genera for the various forms of a determinant  $D$ .

Exhibit the different pro-primitive genera for  $D = -95$ .

9. If  $K, K', K''$  denote three classes whose divisors are prime in pairs, prove that

$$K(K'K'') = K'(K''K) = K''(KK'),$$

where the classes in the brackets are compounded first.

If  $M$  denotes any pro-primitive class, show that there exists a positive integer  $h$ , the same for all classes such that  $M^h = 1$ .

10. Define an *ambiguous* class. If  $A$  denotes a pro-primitive ambiguous class, prove that  $A^2 = 1$ . Determine the total number of pro-primitive ambiguous classes for the determinant  $D \equiv 0 \pmod{8}$  and point out its relation with the total number of genera for the same determinant.

## SEVENTH PAPER

### (THEORY OF GROUPS—FIRST PAPER)

Examiners— $\left\{ \begin{array}{l} \text{MR. MOHITMOHAN GHOSH, M.Sc.} \\ \text{PROF. GANESH PRASAD, D.Sc.} \end{array} \right.$

*The questions are of equal value*

*Candidates are required to answer six questions only, one of which must be Question 3.*

1. (a) If  $ba = a^2b^2$ , prove that

$$bab^2a = (a^2b)^{22} (bab^2a)b^{22};$$

$$(ba)^2 = (a^2b)^2 (ba)^2 (ab^2)^2.$$

(b) Define the inverse of an element and prove that if  $a$  is inverse of  $b$ , then  $b$  is also inverse of  $a$ .

Explain clearly the method of finding the inverse of a circular permutation.

If  $a^2 = b^2 = 1$ , prove that  $ab$  and  $ba$  are inverse to each other.

2. (a) Prove that  $(b^{-1}ab)^t = b^{-1}a^t b$ ,  $t$  being a positive integer.

If  $b^{-1}ab = a^k$ , prove that under certain conditions

$$b^{-y}a^x b^y = a^{x^k y}.$$

State the restrictions, if any, imposed on  $x$ ,  $k$ , and  $y$ .

(b) Prove that the transform of a permutation  $S$  by a permutation  $T$  is found by performing the permutation  $T$  on the cycles of  $S$ .

Verify the truth of the above proposition by taking

$$S \equiv \begin{pmatrix} 12345678 \\ 53172846 \end{pmatrix}$$

$$T \equiv \begin{pmatrix} 12345678 \\ 74658312 \end{pmatrix}$$

3. (a) If  $(S)$  denotes a transposition and

$$\equiv \Delta \begin{vmatrix} 1, & x_1, & x_1^{-1}, & \dots, & x_1^{n-1} \\ 1, & x_2, & x_2^{-1}, & \dots, & x_2^{n-1} \\ 1, & x_3, & x_3^{-1}, & \dots, & x_3^{n-1} \\ \dots & \dots & \dots & \dots & \dots \\ 1, & x_n, & x_n^{-1}, & \dots, & x_n^{n-1} \end{vmatrix}$$

prove that

$$(S) \Delta = -\Delta.$$

Hence or otherwise establish the theorem :—

“In whatever way a given permutation is expressed as a product of transpositions, the number of transpositions is either always even or always odd.”

(b) Show that the substitutions with matrices

$$\begin{vmatrix} a & b & c & f & g \\ 0 & a & b & 0 & f \\ 0 & 0 & a & 0 & 0 \\ 0 & h & i & d & e \\ 0 & 0 & h & 0 & d \end{vmatrix} \quad \text{and} \quad \begin{vmatrix} \alpha & 1 & 0 & 0 & 0 \\ 0 & \alpha & 1 & 0 & 0 \\ 0 & 0 & \alpha & 0 & 0 \\ 0 & 0 & 0 & \alpha & 1 \\ 0 & 0 & 0 & 0 & \alpha \end{vmatrix}$$

are permutable.

(c) Explain what is meant by Invariant of a Group.

If  $f(x_1, x_2, \dots, x_n)$  is an invariant of  $G$ , prove that  $f(\phi_1, \phi_2, \phi_n)$  is an invariant of  $T^{-1}GT$ , where

$$x_i' = \phi_i(x_1, x_2, \dots, x_n),$$

( $i=1, 2, 3, \dots, n$ ) is the substitution  $T^{-1}$ .

4. (a) Explain what is meant by isomorphic groups and show that the group of circular permutations

$$1, (123), (132), (23), (12), (13)$$

is isomorphic with the substitution group

$$x' = x, \frac{1}{1-x}, \frac{x-1}{x}, \frac{1}{x}, \frac{x}{x-1}, 1-x.$$

(b) If  $G$  and  $\Gamma$  are isomorphic groups, prove that the elements of  $G$  corresponding to identity in  $\Gamma$  form a normal subgroup.

Hence establish the proposition :—

If  $G$  and  $\Gamma$  are isomorphic groups and  $L$  of order  $l$  is the subgroup formed by the elements of  $G$  corresponding to identity in  $\Gamma$ ,  $l$  elements of  $G$  correspond to each element of  $\Gamma$ .

5. (a) If the order of a group is divisible by a number  $r$  and  $a$  is an element not normal in it, prove that the number of elements whose  $r^{\text{th}}$  power is conjugate to  $a$  is a multiple of  $r$ .

State the general theorem of which this is a particular case.

To whom is the general theorem due ?

(b) Prove that the alternating group of degree  $m$  is simple unless  $m=4$ .

6 (a) Explain Euler's construction for the composition of two rotations and prove that every odd number of successive reflexions is equivalent to three successive reflexions.

(b) Define a fractional linear substitution and show how to find its poles.

If  $\alpha$  and  $\beta$  are the poles of

$$S \equiv \left( x' = \frac{ax+b}{cx+d} \right),$$

where  $ad-bc=1$ ,  $a+d=2 \cos \phi$ ,

prove that  $\alpha$  and  $\beta$  have the values

$$\frac{1}{2c} \{a-d \mp 2i \sin \phi\}, \quad i \text{ denoting } \sqrt{-1}.$$

7. (a) Define an independent set of generators of a group.

Show that  $a^4 = b^4 = 1$ ,  $ba = a^2b^3$

is the same abstract group as

$$g^4 = h^5 = 1, \quad hg = gh^2.$$

(b) Prove that two Abelian groups with the same invariants are simply isomorphic.

8. (a) If  $c = a^{-1}b^{-1}ab$  is permutable with  $a$ , prove that  $c^a$  is the commutator of  $a^a$  and  $b$ .

(b) If  $H$  is a normal subgroup of a group  $G$  and  $\Delta$  is the commutant of  $G$ , prove that

$$\frac{\{H, \Delta\}}{H} \text{ is the commutant of } \frac{G}{H}.$$

9. (a) Explain what is meant by a group of inner automorphisms and prove that the group of inner automorphisms  $A$  of a group  $G$  is not cyclic unless  $G$  is Abelian when  $A \equiv 1$ .

(b) Prove that a group of order  $2^n$  containing only one subgroup of order 2 is cyclic or dicyclic.

10 (a) Prove that a group  $G$  containing  $kp+1$  Sylow subgroups of order  $p^a$  is isomorphic with a transitive permutation-group of degree  $kp+1$ .

(b) Define a soluble group and prove that if the series of derived groups of group  $G$  ends with the identical group,  $G$  is soluble.

11. What do you understand by the characteristic of an operation of a group? Show that in general the characteristics of inverse operations are conjugate complex quantities; and that for the symmetric group the characteristic is necessarily real and integral or else zero.

Show that the symmetric group of degree  $n$  has irreducible representation corresponding to every partition of  $n$  a the sum of positive integers  $\alpha_1, \alpha_2, \dots, \alpha_r$ .

**EIGHTH PAPER**  
(THEORY OF GROUPS—SECOND PAPER)

*Examiner*—{ MR. NARENDRAKUMAR MAJUMDAR, M.A.  
PROF. GANES PRASAD, D.Sc.

*The questions are of equal value.*

[ N.B.—You are required to attempt the FOURTH and NINTH questions ; full marks may be obtained by answering these and ANY FOUR of the remaining questions.]

1. Find the group of the function

$$x_1x_2 + x_2x_3.$$

Hence or otherwise determine the groups of the functions

$$x_1x_3 + x_2x_3 \text{ and } x_1x_2 + x_2x_3.$$

Determine the group of the function

$$x_1x_2 + x_2x_3 + \omega(x_1x_3 + x_2x_3) + \omega^2(x_1x_2 + x_2x_3)$$

and find the nature of this group and determine its relationship with the previous three groups.

2. (a) Prove that if a rational function  $\phi(x_1, x_2, \dots, x_n)$  remains unaltered by all the substitutions which leave another rational function  $\psi(x_1, x_2, \dots, x_n)$  unaltered, then  $\phi$  is a rational function of  $\psi$  and the elementary symmetric functions.

(b) Hence or otherwise prove that every one of the arguments  $x_1, x_2, \dots, x_n$  can be rationally expressed in terms of the elementary symmetric functions and any  $n$ -valued function of the arguments.

3. Give a scheme of solution of the quartic equation, and determine in what circumstances the various resolvent equations will be binomial.

4. Prove that every equation which is solvable by radicals can be reduced to a chain of binomial equations of prime degrees whose roots are rational functions of the roots of the given equation.

Hence prove that the general equation of a degree higher than four is not solvable by radicals.

5. (a) Define domain of rationality, equality, and reducibility.

(b) Prove that if two irreducible equations in a domain of rationality have one root in common, they are identical.

6. State the two fundamental properties of the group of an equation, and prove that the two properties completely define such group.

Determine the group of the equation  $x^3 - 2 = 0$  in the domain of rational numbers.

7. (a) Prove that the group  $G$  of an Abelian equation is a regular cyclic group.

(b) Shew that the cyclotomic equation for the imaginary  $p^{\text{th}}$  roots of unity,  $p$  being prime, is an Abelian equation with respect to the domain of all rational numbers.

8. Prove the following Theorem of Jordan :—

“For a given domain  $R$  let the group  $G_1$  of an equation  $F_1(x) = 0$  be reduced to  $G_1'$  by the adjunction of all the roots of a second equation  $F_2(x) = 0$ , and let the group  $G_2$  of the second equation be reduced to  $G_2'$  by the adjunction



of all the roots of the first equation  $F_1(x)=0$ . Then  $G_1^{-1}$  and  $G_2^{-1}$  are self-conjugate subgroups of  $G_1$  and  $G_2$  respectively, and the quotient-groups  $G_1/G_1^{-1}$  and  $G_2/G_2^{-1}$  are simply isomorphic."

Explain the utility and importance of this proposition in the theory of equations.

9. (a) Discuss the criterion for the possibility of geometrical constructions by rulers and compasses.

(b) Shew that a regular polygon of 257 sides can be constructed by rulers and compasses, but it is not possible to construct a regular polygon of 25 or 35 sides.

10. (a) Determine the meta-cyclic group.

(b) Shew that the equation  $x^p - 2 = 0$ , where  $p$  is prime, is a Galoisian equation.

11. Prove the following :-

(a) If an equation is of the fifth degree and irreducible, the coefficients of the equation being numerical and rational, then the necessary and sufficient condition that the equation may be soluble by radicals is that the sextic resolvent shall have a rational root.

(b) If the sextic resolvent of a quintic has more than one rational root, then the quintic itself must have a rational root.

## SEVENTH PAPER

### (FINITE DIFFERENCES—FIRST PAPER)

Examiners— $\left\{ \begin{array}{l} \text{MR. P. L. GANGULI, M.A. B.L.} \\ \text{MR. SATISCHANDRA GHOSH, M.A.} \end{array} \right.$

*The questions are of equal value.*

*Only SEVEN questions are to be attempted.*

1. (a) Prove Herschel's theorem in the form

$$\phi(e') = \phi(E)e^0.$$

Hence deduce the secondary form of Maclaurin's theorem.

b) Prove

$$(e' - 1)^n = \frac{\Delta^n O^n}{n!} t^n + \frac{\Delta^n O^{n+1}}{(n+1)!} t^{n+1} + \dots$$

2. (a) Shew that whatever be the value of  $n$ ,

$$f\{(1 + \Delta)^n\} O^r = n^r f(1 + \Delta) O^r.$$

(b) Prove that

$$\{\log(E)\}^m O^n = 0,$$

unless  $m = n$  when it is equal to  $n!$

3. If  $\Delta u_x = u_{x+h} - u_x$  and  $\lambda = \frac{a^h}{a^h - 1}$ ,

shew that

$$u_x + \lambda \Delta u_x + \lambda^2 \Delta^2 u_x + \dots + \lambda^n \Delta^n u_x \\ = a^{-x} \{(a^h - 1) \Sigma a^{hx} u_x + \lambda^n \Sigma a^{(x+h)n} \Delta^{n+1} u_x\}.$$

4. Sum the series

$$(a) \frac{10}{1.2.3.4} + \frac{14}{2.3.4.5} + \frac{18}{3.4.5.6} + \dots n \text{ terms.}$$

$$(b) \tan^{-1} \frac{1}{34.1^2 - 8.1 - 8} + \tan^{-1} \frac{1}{34.2^2 - 8.2 - 8} \\ + \dots + \tan^{-1} \frac{1}{34x^2 - 8x - 8}.$$

5. Find an approximate value of  $\Gamma(x+1)$  when  $x$  is large.

6. If  $B_1, B_2$ , etc., are the numbers of Bernoulli, prove

$$B_{2r+1} = (-1)^{r+1} \left\{ \frac{O^{2r}}{1} - \frac{\Delta O^{2r}}{2} + \dots + \frac{\Delta^{2r} O^{2r}}{2x+1} \right\}.$$

7. Prove

$$f(x\Delta)(xE)^m u_x = (xE)^m f(x\Delta + m) u_x.$$

8. (a) Prove the Gregory-Newton formula of interpolation.

(b) Given the table of values

$x$	-3	-2	-1	0	1
$y$	16	7	4	1	-8

find by means of the Gregory-Newton formula an expression for  $y$  as a function of  $x$ .

9. Prove Gregory's formula of numerical integration

$$\frac{1}{w} \int_a^{a+rw} f(x) dx = \left( \frac{1}{2} f_0 + f_1 + \dots + f_{r-1} + \frac{1}{2} f_r \right) \\ - \frac{1}{12} (\Delta f_{r-1} - \Delta f_0) - \frac{1}{24} (\Delta^2 f_{r-2} + \Delta^2 f_0) \dots$$

10. Prove the Gauss formula of interpolation

$$f(a+xw) = f(a) + x \Delta f(a) + \frac{x(x-1)}{2!} \Delta^2 f(a-w) \\ + \frac{(x+1)x(x-1)}{3!} \Delta^3 f(a-w) + \dots$$

Hence deduce the central difference formula

$$u_x = u_0 + x \mu \delta u_0 + \frac{x^2}{2!} \delta^2 u_0 + \frac{x(x^2-1)}{3!} \mu \delta^3 u_0 + \dots$$

## EIGHTH PAPER

## (THEORY OF FINITE DIFFERENCES—SECOND PAPER)

Examiners—{MR. NARENDRAKUMAR MAJUMDAR, M.A.  
DR. GORAKH PRASAD, D.Sc.

[The questions are of equal value. Full marks for the FIRST and the NINTH questions and ANY FOUR of the remaining questions.]

1. Show that a sufficient condition for the linear dependence of solutions of the linear homogeneous difference equation is the identical vanishing of the determinant of Casorati.

Prove that the Casorati's determinant  $D(x)$  of a fundamental system of solutions of the difference equation

$$a_n(x)y(x+n) + a_{n-1}(x)y(x+n-1) + \dots + a_0(x)y(x) = 0$$

satisfies the difference equation

$$D(x+1) = (-1)^n \frac{a_0(x)}{a_n(x)} D(x).$$

2. Prove that the linear homogeneous difference equation

$$y(x+1) - r(x)y(x) = 0$$

is satisfied formally by the series

$$S(x) = x^{\mu x} c_0 x e^{-\mu x} x^{c_1} - 2 \left( S_0 + \frac{S_1}{x} + \dots \right)$$

and that there exist also two analytic solutions

$$h(x) = \lim_{n \rightarrow \infty} \frac{1}{r(x)} \frac{1}{r(x+1)} \dots \frac{1}{r(x+n)} T(x+n+1),$$

$$g(x) = \lim_{n \rightarrow \infty} r(x-1)r(x-2) \dots r(x-n)T(x-n),$$

where  $T(x)$  is the sum of the first  $k$  terms of  $S(x)$ .

Prove also that the solution  $h(x)$  is analytic throughout the plane except for poles at the zeroes of  $r(x)$  and points congruent on the left, and that it vanishes at the poles of  $r(x)$  and points congruent on the left and is represented asymptotically by  $S(x)$  in the sector

$$-\pi < \arg x < \pi.$$

3. Solve any two of the following equations :—

(a)  $y(x+4) - 4y(x+3) + 8y(x+2) - 8y(x+1) + 4y(x) = 0.$

(b)  $u_{x+4} - 6u_{x+2} + 8u_{x+1} - 3u_x = x^2 + (-3)^x.$

(c)  $u_{x+3} - 3a^2u_{x+1} + a^3u_x = xy.$

4. Find the asymptotic form of the factorial series :—

$$1 + \frac{1}{x} + \frac{1}{x(x+1)} + \frac{1}{x(x+1)(x+2)} + \dots$$

Also solve the equation :—

(a)  $y(x+1) - \left(1 - \frac{1}{x^2}\right)y(x) = x+1,$

(b)  $xy(x+1) - (x+1)y(x) = 1.$

5. Determine  $u_{x,t}$  from the equation

$$c^2 \frac{d^2}{dt^2} u_{x,t} = \Delta^2 u_{x,t}$$

where  $\Delta$  affects  $x$  only; and, assuming as initial conditions

$$u_{x,0} = ax + b, \quad \frac{d}{dt} u_{x,0} = a't',$$

show that

$$\frac{d}{dt} u_{x,t} = A\lambda^2(\mu' + \mu^{-t}),$$

where  $A$ ,  $\lambda$ , and  $\mu$  are constants.

6. Show how to solve the linear functional equation

$$\phi\psi^nx + a_1\phi\psi^{n-1}x + \dots + a_n\phi(x) = X,$$

where  $\psi(x)$  and  $X$  are known functions of  $x$ .

Solve completely the equation

$$\phi(m^2x) + a\phi(mx) + b\phi(x) = x^n.$$

7. Determine the class of curves in which the square of any normal exceeds the square of the ordinate erected at its foot by a constant quantity  $a$ . Discuss the cases when  $a$  is or is not zero.

8. Solve the equations

$$\left. \begin{aligned} u_{x+1} &= (n-m^2)v_x + u_x \\ v_{x+1} &= (2m+1)v_x + u_x \end{aligned} \right\},$$

and show that if  $m$  be the integral part of  $\sqrt[n]{\frac{u_x}{v_x}}$  converges, as  $x$  increases to

the decimal part of  $\sqrt[n]{n}$ .

9. (a) Obtain expressions for the mean and the dispersion of a Lexian series.

(b) Apply the method of computing moments by summation to find the second moment about the mean of the frequency distribution given below of the weights of adults:—

Weights (lbs.).	Frequencies.	Weights (lbs.).	Frequencies.
90	2	190	263
100	26	200	107
110	183	210	85
120	338	220	41
130	694	230	16
140	1,240	240	11
150	1,070	250	8
160	891	260	1
170	492	270	0
180	304	280	1

10. (a) Derive Spencer's formula of Graduation.

(b) Explain how you would estimate the degree of correlation in a non-normal frequency distribution, and examine if your estimate would be identical with the "correlation coefficient" in case the frequency distribution becomes normal.

11. (a) Solve the equation :—

$$\left(\frac{\psi x+1}{\psi x-1}\right)^n - \left(\frac{\psi \frac{x}{x-1}+1}{\psi \frac{x}{x-1}-1}\right)^n = \frac{(x-1)^2-1}{x-1}.$$

(b) Solve

$$\phi(x+y) + \phi(x-y) = \phi(x) \cdot \phi(y),$$

and briefly indicate the utility of this proposition in *Mechanics*.

## SEVENTH PAPER

### (MODERN GEOMETRY—FIRST PAPER)

Examiners—{ PROF. SYAMADAS MUKHERJEE, M.A., PH.D.  
DR. P. N. DASGUPTA, M.A., PH.D.

*The questions are of equal value.*

*Not more than six questions are to be attempted.*

1. Shew that two one-dimensional geometric forms, each consisting of three elements, are always projective.

Shew also that two harmonic ranges are always projective with one another.

2. When are two ranges said to be similar?

Shew that if the points at infinity  $I$  and  $I'$  of two projective ranges  $u$  and  $u'$  correspond to each other, the ranges will be similar.

Shew how a range  $ABCD$  is made projective with the range  $BADC$ . What are the other ranges formed from the same four points which are projective with  $ABCD$ ?

3. Shew that two superposed projective pencils either have at most two self-corresponding elements or else every element coincides with its correspondent.

Two planes  $\Pi, \Pi'$  contain two quadrangles  $ABCD, A'B'C'D'$  respectively. Shew how one can be derived from the other by projection.

4. If a hexagon  $AB'CA'BC'$  is inscribed in a conic, the three pairs of opposite sides intersect one another in three collinear points. Prove this and state its correlative proposition.

Shew how a tangent can be drawn to a conic from a given point  $H$  when five tangents to the conic are given.

5. Prove Desargues' theorem : "Any transversal whatever meets a conic and the opposite sides of an inscribed quadrangle in three conjugate pairs of points of an involution."

Prove also that if a variable conic pass through two given points  $P$  and  $P'$  and touch two given straight lines, the chord which joins the points of contact of these two straight lines will always pass through a fixed point on  $PP'$ .

6. Shew how to determine the self-corresponding points of two projective ranges on a conic.

Shew how to inscribe in a given conic a triangle whose sides pass through three given points.

7. Deduce the theorem of Desargues : "If two triangles  $ABC$  and  $A'B'C'$ , lying respectively on the planes  $\sigma$  and  $\sigma'$ , are such that the straight lines  $AA'$ ,  $BB'$ ,  $CC'$  meet in a point, then the three pairs of corresponding sides  $BC$  and  $B'C'$ , and  $CA$  and  $C'A'$ ,  $AB$  and  $A'B'$ , intersect in points lying in a straight line, by axioms of Group I alone, including space axioms."

Shew that Desargues' theorem, when  $ABC$  and  $A'B'C'$  lie in the same plane, cannot be deduced from the plane axioms of Groups I, II, III alone.

8. State the Axiom of Pasch. Shew how points on a plane, not lying on a given straight line, are divided into two classes by the help of this axiom.

Shew that straight lines exist such that a given set of  $n$  points on a plane lie on the same side of each such straight line, by help of axioms of Groups I and II only.

9. State the linear axioms of order of Group II.

Deduce that if  $C$  lies between  $A$  and  $D$ , and  $B$  lies between  $A$  and  $C$ , then  $B$  lies between  $A$  and  $D$ .

10. Shew how Hilbert deduces that supplementary angles are congruent.

Shew how Hilbert deduces that all right angles are equal.

## EIGHTH PAPER

(MODERN GEOMETRY—SECOND PAPER)

Examiners— $\left\{ \begin{array}{l} \text{MR. MOHITMOHAN GHOSH, M.Sc.} \\ \text{,, HARENDRANATH DATTA, M.Sc.} \end{array} \right.$

*The questions are of equal value.*

*Candidates are required to answer six questions only.*

1. Show that every projection or a section of a harmonic form is itself a harmonic form.

If  $A, B, C, D$  are four harmonic points, then  $A$  and  $B$  are necessarily separated by  $C$  and  $D$ .

2. Prove that if  $ABC \dots MN$  and  $A'B'C' \dots M'N'$  are two projective ranges in the same plane, every pair of straight lines such as  $MN'$  and  $M'N$  intersect in points lying on a fixed straight line.

3. When are two ranges of points said to be similar? Show that two similar ranges of points are projective.

Show that two ranges on the same base, which have a single self-corresponding point lying at infinity, are directly equal.

4. What are the *double points* of two collinear projective ranges of points in involution? Do they exist in every case?

Show that the three pairs of opposite sides of a complete quadrangle are cut by any transversal in three pairs of conjugate points of an involution; and state its correlative theorem.

5. Prove that any number of tangents to a conic determine on a pair of fixed tangents two projective ranges. Hence deduce Brianchon's theorem regarding a hexagon circumscribing a conic.

6. (a) If  $A'B'C'$  is a triangle inscribed in a triangle  $ABC$ , prove that there is an unlimited number of triangles simultaneously circumscribed to  $ABC$  and inscribed in  $A'B'C'$ .

(b)  $A, B, C, D$  are any four points of a row, show that

$$ABCD \wedge BADC \wedge CDAB \wedge DCBA.$$

7. Explain clearly the meaning of *conjugate reguli*. If  $\rho$  is a curved surface containing two conjugate reguli, show that the section of  $\rho$  by any plane is a conic or a line-pair.

8. (a) In a decagon  $AB'CD'E A'BC'DE'$ , the four intersections  $(AB', A'B)$ ,  $(BC', B'C)$ ,  $(CD', C'D)$ ,  $(DE', D'E)$  lie on a straight line  $u$ . Prove that the intersection of  $EA'$  with  $E'A$  also lies on  $u$ .

State the general theorem of which this is a particular case.

(b) If two triangles are self-conjugate with respect to a conic, prove that their six vertices lie on a conic.

9. (a) Explain the method of adding and subtracting two casts and show that

$$c_1 - (-c_2) = c_1 + c_2.$$

(b) Establish a method for multiplying two casts and show that

$$c_1(c_2 + c_3) = c_1c_2 + c_1c_3,$$

where  $c_1, c_2$ , and  $c_3$  represent three distinct casts.

10. If  $a, b, c, d$  are any four constants, such that  $(ad - bc)$  is not zero, prove that the equation

$$axx' + bx + cx' + d = 0$$

fixes a projectivity on a conic, and conversely.

## SEVENTH PAPER

### (NON-EUCLIDEAN GEOMETRY—FIRST PAPER)

Examiner—{ PROF. SYAMADAS MUKHERJEE, M.A., PH.D.  
MR. MOHITMOHAN GHOSH, M.Sc.

*The questions are of equal value.*

*Only six questions are to be attempted.*

1. State the axioms of order of Hilbert.

Deduce from these axioms that if  $C$  lies between  $A$  and  $B$  and  $D$  lies between  $A$  and  $C$ , then  $D$  lies between  $A$  and  $B$  and  $C$  lies between  $D$  and  $B$ .

2. State precisely Hilbert's axiom of parallels for hyperbolic geometry.

If a line  $AB$  be parallel to a line  $CD$ , shew that points exist on  $AB$  whose distance from  $CD$  is less than any arbitrary length and also that points exist on  $AB$  whose distance from  $CD$  is greater than any arbitrary length.

3. Shew that in hyperbolic geometry there are three kinds of circles, corresponding to the three kinds of concurrence of straight lines.

Shew that through the angular points of a triangle four circles pass.

4. Establish a correspondence between a right-angled triangle and a three-right-angled quadrilateral.

Shew that corresponding to a given right-angled triangle there exist five three-right-angled quadrilaterals.

5. Shew that the sum of the angles of a hyperbolic triangle is less than two right angles.

Shew that if three angles of one triangle are equal, respectively, to three angles of another triangle, the two triangles are congruent.

6. Define a Horo-Cycle and shew that all horo-cycles are congruent.

Shew that if  $s$  and  $s'$  be arcs of two horo-cycles intercepted between the same two common axes, any third common axis will divide them proportionally.

7. Shew that the geometry of an infinitesimal triangle is Euclidean.

With the help of this hypothesis shew that the element of area in Cartesian co-ordinates is  $\cosh \frac{y}{k} dx dy$ .

8. Calculate the area of a hyperbolic quadrilateral with three right angles and an acute angle  $\beta$ .

Obtain the area, in terms of the three angles, of a hyperbolic triangle.

9. Prove, after Saccheri, that if the hypothesis of the obtuse angle is true in one case it is true in every case.

10. What is the Postulate of Archimedes? Shew how Legendre proved by assuming the straight line to be infinite and using the Postulate of Archimedes, that three angles of a triangle cannot be together greater than two right angles.

## EIGHTH PAPER

### (NON-EUCLIDEAN GEOMETRY—SECOND PAPER)

Examiners— $\left\{ \begin{array}{l} \text{DR. SURENDRAMOCHAN GANGULI, D.Sc.} \\ \text{MR. HARENDRANATH DUTTA, M.Sc.} \end{array} \right.$

*The questions are of equal value.*

ANY SIX questions carry full marks.

1. Prove that two planes in a four-space have two common perpendicular planes, each intersecting the four planes, namely, the two given planes and their two absolutely perpendicular planes at the common point.

Prove further that these common perpendicular planes are themselves mutually absolutely perpendicular.

2. When is a plane said to be perpendicular to a hyperplane?

Prove that if a plane  $\alpha$  is perpendicular to a hyperplane along a line  $l$ , any plane in the hyperplane perpendicular to  $l$  is absolutely perpendicular to  $\alpha$  and any plane absolutely perpendicular to  $\alpha$  through a point of the hyperplane lies entirely in the hyperplane.

3. Define the *direction-cosines* of a plane in four-space and show that they uniquely determine the plane.

Show that the plane  $(l, m, n, l, m, n')$  is isocline to the plane  $x_3 = x_4 = 0$ , and prove that if  $\phi$  is the angle between them  $\tan^2 \phi = -n/n'$ .



4. Distinguish between a *hyperplane angle* and a *spherical dihedral angle*.

Establish the following :—

- (1) The plane angle of the hyperplane angle is the same at all points of the face.
- (2) A spherical dihedral angle has the same measure at all points of its edge.

5. Explain what you understand by *two conjugate series* of isocline planes.

Prove that all the planes isocline to a given plane at an angle  $45^\circ$  lie in two conjugate series.

6. Define *half-parallel* planes and prove that if a plane distinct from each of two parallel planes intersects one in a line and does not intersect the other in a line, it will be half-parallel to the second.

7. Show that in a four-space, rotation can take place around a plane, and in this rotation the absolutely perpendicular plane to the fixed plane rotates upon itself through the angle of rotation.

Prove that rotations around two absolutely perpendicular planes are commutative.

8. What are the Plückerian co-ordinates of a right line in a four-space? Find an expression for the shortest distance between two such lines in terms of their Plückerian co-ordinates.

Deduce the condition that any two lines in a four-space may intersect.

9. Define the following :—

*Double pyramid, Hyperconical hypersurface, Hypercone, Double cone, Hypercube.*

Prove that the diagonal of a hypercube is twice as long as its edge.

10. Prove that any plane polygon and its projection upon an isocline plane are similar.

Hence, or otherwise, deduce that the projection of a circle upon a plane isocline to its plane is a circle.

11. Write short notes on the geometrical representation of two complex variables in a space of four dimensions.

12. Show that the *hypervolume* of a hypersphere is equal to its *boundary-content* multiplied by one-fourth of its radius.

## SEVENTH PAPER

(VECTOR ANALYSIS AND QUATERNIONS—FIRST PAPER)

Examiners— { MR. SATISCHANDRA GHOSH, M.A.  
 { DR. SATISCHANDRA BAGCHI, M.A. I.I.D.,  
 BAR.-AT-LAW.

*The questions are of equal value.*

*Attempt six questions only.*

1. (a) Define  $e^i$ .

Establish (i)  $Te^i = e^{Sq}$ .

(ii)  $Ue^i = \cos TV_i + UV_i \sin TV_i$ .

(b) Show that

$$\left(\frac{\alpha}{\gamma}\right)^{\frac{1}{2}} \left(\frac{\gamma}{\beta}\right)^{\frac{1}{2}} \left(\frac{\beta}{\alpha}\right)^{\frac{1}{2}} = \frac{\alpha}{U(\gamma+\alpha)} \cdot \frac{U(\beta+\gamma)}{U(\alpha+\beta)} = \left(\frac{\gamma+\alpha}{\beta+\gamma} \cdot \frac{\alpha+\beta}{\gamma+\alpha} \cdot \frac{\beta+\gamma}{\alpha+\beta}\right)^{\frac{1}{2}}$$

where  $\alpha$ ,  $\beta$ , and  $\gamma$  are any three unit vectors.

2. (i) Adduce arguments in support of Hamilton's identification of vector and quadrantal versor.

(ii) What do the following equations represent—

$$(a) \quad U \left( \frac{\rho}{\alpha} \right)^2 = -1.$$

$$(b) \quad \left( U \frac{\rho}{\alpha} \right)^2 = 1.$$

$$(c) \quad \left( \frac{w+\rho-\alpha}{\beta} \right)^2 = -1.$$

3. (i) Define the differential of a quaternion function of a quaternion. Show that the differential function is a linear and distributive function of the differential of the quaternion.

(ii) Prove that

$$(a) \quad d\alpha^2 = xS \frac{d\alpha}{\alpha} \cdot \alpha + V \frac{d\alpha}{\alpha} \cdot V\alpha$$

where  $x$  is constant and  $\alpha$  variable.

$$(b) \quad dq^{\frac{1}{2}} = \frac{Kq^{\frac{1}{2}} \cdot dq \cdot q^{-\frac{1}{2}} + dq}{4Sq^{\frac{1}{2}}}.$$

4. (i) Defining  $\nabla$  by the relation

$$dP = -S\nabla P d\rho$$

where  $P$  is any scalar function of a variable vector  $\rho$ , obtain the most general expression for the operator.

Prove that

$$\nabla TVa\rho = UVa\rho \cdot \alpha.$$

(ii) Establish

$$\nabla \cdot pq = \nabla p \cdot q_0 + \nabla \cdot p_0 \cdot q$$

where the suffix is intended to denote that the affected symbols are not to be operated on by  $\nabla$ .

5. (a) Resolve the vector curvature of a curve traced on a surface into its components perpendicular to and along the normal.

(i) Derive Meusnier's theorem from the first component.

(ii) Derive the differential equation of a geodesic from the second component.

(b) Find the centre of the osculating circle of a curve.

6. Show that the Laplacian in orthogonal curvilinear co-ordinates is

$$\nabla^2 = UVW \left\{ \frac{\partial}{\partial u} \left( \frac{U}{VW} \frac{\partial}{\partial u} \right) + \text{two similar terms} \right\}. \quad [\text{Use the form } \nabla^2 \phi$$

$$= \text{div} \cdot \nabla \phi \text{ and put } \nabla \phi = \bar{U} \frac{\partial \phi}{\partial u} + \bar{V} \frac{\partial \phi}{\partial v} + \bar{W} \frac{\partial \phi}{\partial w}, U, V, W \text{ are the tensors}$$

of  $\bar{U}$ ,  $\bar{V}$ ,  $\bar{W}$ .]

7. What conclusions may be drawn from the following equation about three otherwise unknown vectors  $A, B, C$

$$[A[BC]]=0$$

or in Silberstein's notation

$$V A V B C = 0$$

[i.e., vector product of  $A$  and vector product of  $B$  and  $C=0$ ]?

Discuss fully all possibilities.

8. Interpret the decomposition of a linear function into a self-conjugate function preceded or followed by a rotation in terms of 'strain.'

Show that any strain followed by its conjugate gives a pure strain which is the square of the pure part of either.

9. If  $u$  be the potential due to a continuous distribution of attracting matter, find the value of  $\nabla^2 u$  at  $P$  where (i)  $P$  is a point occupied by attracting matter, (ii)  $P$  is wholly outside the attracting matter.

10. Let  $i, j, k$  be three constant vectors and  $a, b, c$  be three variable vectors; prove that the latter define a field given by

$$\phi = ai + bj + ck \text{ and } \int \nabla \cdot \phi d\tau = \int d\sigma \cdot \phi.$$

[This is the well-known Gauss's theorem;  $d\tau$  is the volume element and  $d\sigma$  is the surface element.]

## EIGHTH PAPER

### (VECTOR ANALYSIS AND QUATERNIONS—SECOND PAPER)

Examiners— { DR. HARIDAS BAGCHI, M.A., PH.D.  
MR. M. N. RAY, M.A., B.L.

*The questions are of equal value.*

*Answer ANY SIX questions.*

1. (i) Compare the *tensors, angles, and axes* of the quaternions  $q$  and  $q^n$  (where  $n$  is a positive integer).

(ii) Prove that, if  $\rho$  be a vector, the expression

$$q\rho q^{-1}$$

represents another vector, derivable from  $\rho$  by a kinematical rotation round the axis of  $q$  through an angle equal to twice that of  $q$ .

Given that

$$q^n \rho q^{-n} = \rho,$$

prove that the angle of  $q$  is  $\frac{\pi}{n}$ .

2. Work out the general equation of a sphere in the form

$$\rho^2 - 2S\lambda\rho + l = 0$$

where  $\lambda$  is a vector constant and  $l$  a scalar constant.

By reduction to the above form or by appeal to *a priori* reasoning, make sure that the equation

$$T(w + \rho) = a$$

defines a sphere, provided that  $w$  and  $a$  are fixed scalars.

Verify that the equations

$$T(5+\rho-a)=13$$

and

$$T(16+\rho-2a)=20$$

denote two equal spheres, having their centres collinear with the origin.

[N.B.— $a$  is a vector constant.]

3. (i) Reduce the equation of a straight line to the form

$$\rho = a + t\beta,$$

where  $t$  is a scalar parameter and  $a, \beta$  are vector constants.

If  $P, Q$  be two points, lying respectively on the two lines

$$\text{and } \left. \begin{aligned} \rho &= a + t\beta \\ \rho &= a' + t'\beta' \end{aligned} \right\}$$

prove that the distance  $PQ$  will be a minimum, provided that the parameters  $t, t'$  associated with  $P, Q$  conform to the relations

$$\text{and } \left. \begin{aligned} S. \beta(a-a'+t\beta-t'\beta') &= 0 \\ S. \beta'(a-a'+t\beta-t'\beta') &= 0 \end{aligned} \right\}.$$

(ii) For the pair of lines

$$\left. \begin{aligned} \rho &= a + tV. \lambda(a-\beta) \\ \rho &= a' + t'V. \mu(a-\beta) \end{aligned} \right\} \text{ (where } UV \neq U\mu)$$

prove that the shortest distance is none other than the line, joining the terminal points of the vectors  $a, \beta$ .

4. Show how the equation of a curve (other than a null line) can be brought to the parametric form

$$\rho = \phi(s),$$

where  $\phi$  is a vector function of the arcual parameter  $s$ .

Prove that the unit vectors along the tangent, principal normal, and binormal, at an arbitrary point  $s$ , are respectively equal to

$$\rho', U\rho'', U(\rho'\rho''),$$

where the dashes denote differentiation with respect to  $s$ .

Deduce or prove directly that the necessary and sufficient condition for a plane curve is that the relation

$$S. \rho'\rho''\rho''' = 0$$

should hold everywhere on the curve.

5. For a surface given in the scalar form

$$f(\rho) = 0$$

devise a method of calculating the vector normal ( $v$ ) at a point as a function of  $\rho$ .

Find the differential equations of the geodesics and asymptotic lines in the respective forms

$$S. v d\rho d^2\rho = 0$$

and

$$S. d\rho dv = 0.$$

Deduce therefrom or prove otherwise that a straight line is the only type of geodesic, which is an asymptotic line as well.

6. If vectors are drawn in the body from an arbitrary base-point to represent the resultant moment, prove that the locus of their extremities is an ellipse when the forces receive all possible rotations about a given axis.

7. Prove that the locus of points having a velocity of given magnitude is a right circular cylinder coaxial with the instantaneous axis.

Prove that the instantaneous acceleration of a point of a rigid body moving in any manner is a linear function of the vector to the point from the acceleration centre or

$$\ddot{\rho} = \phi(\rho - a),$$

where

$$\phi(\rho) = V\omega\rho + V\omega V\omega\rho \text{ and } \ddot{a} = 0.$$

8. Interpret Hamilton's focal and cyclic transformations of a self-conjugate function

$$\phi p = a\alpha V\alpha p + b\beta S\beta p = gp + \lambda S\mu p + \mu S\lambda p,$$

where  $\phi p$  represents the displacement due to a small pure strain.

9. Obtain the accelerations of a particle parallel and perpendicular to the radius vector.

Prove that, in the case of a central orbit, the law of the inverse square is the only law for which the hodograph is a circle for all initial conditions.

10. Find the condition that the family of surfaces

$$f(p, u) = 0$$

should form an equipotential system, and determine the potential when the condition is satisfied.

## MIXED MATHEMATICS

### FIRST PAPER

*The questions are of equal value.*

N.B.—Only **THREE** questions to be attempted from **EACH** half.

### FIRST HALF

*Examiner*—MR. S. P. DAS, M.A.

1. Prove that two screws on a cylindroid are reciprocal, if they are parallel to a pair of conjugate diameters of the pitch conic.

Show that a cylindroid can be constructed so as to be reciprocal to any four given screws.

2. Find the condition that a system of forces should be equivalent to a single force.

$ABCD$  is a tetrahedron; forces  $P, Q, R$  act along the edges  $BC, CA, AB$  in order, and forces  $P', Q', R'$  act along  $AD, BD, CD$ ; prove that the condition for a single resultant is

$$\frac{PP'}{BC \cdot AD} + \frac{QQ'}{CA \cdot BD} + \frac{RR'}{AB \cdot CD} = 0.$$

3. Show that a given system of forces can be reduced to two forces, one acting along an arbitrary straight line.

A system of forces equivalent to a wrench  $(R, Rp)$  is to be reduced to two forces inclined at the angle  $\alpha$ ; prove that the shortest distance between their lines of action cannot be less than  $2p \cot \frac{\alpha}{2}$ .

4. A heavy body rests on a fixed rough surface, under the action of gravity. Investigate the nature of equilibrium.

Prove that any body with a plane base, resting on a fixed rough spherical surface, will, when the height of its centre of gravity has the critical value, be in unstable equilibrium.

5. Investigate the equations of equilibrium of an inextensible string, stretched over a rough surface and acted upon by any forces.

Find the form of the string and the tension at any point, in the particular case, when there is no external force and the string is about to slip on the surface at every point in the direction of the tangent to the starting at the point.

Or,

Write a brief note on—

*Six forces in equilibrium.*

## SECOND HALF

Examiner—MR. N. C. GHOSH, M.A.

1. Find the value of the gravitational constant,  $\gamma$ , when a gram, a centimetre, and a second are taken as the units of mass, length, and time respectively, given that the mean density of the earth is  $5.67$  times that of water at  $4^\circ\text{C}$ ., and the mean radius of the earth is  $6.37 \times 10^8$  cm.

Obtain a formula connecting the two values of  $\gamma$  for two different systems of fundamental units. Derive a particular system of units in which the value of  $\gamma$  is 1. What is the astronomical unit of mass in grams when the wave-length,  $4.86 \times 10^{-5}$  cm., of a certain ray of light is taken as the unit of length, and the period of vibration of that ray as the unit of time? (Assume the velocity of light to be  $3 \times 10^{10}$  cm/sec.).

2. Find the attraction of a thin homogeneous straight rod at a point outside it.

$P$  is a point on the bisector of the angle  $C$  of a triangle  $ABC$ . Prove that the line of action of the resultant attraction of the three sides of the triangle at  $P$  bisects the angle  $APB$ , and the magnitude of this force is

$$2\mu \left\{ \frac{1}{\gamma} - \frac{1}{a} \right\} \sin \frac{APB}{2},$$

where  $a$  and  $\gamma$  are the distances of  $P$  from  $BC$ ,  $AB$  respectively, and  $\mu$  is the mass per unit length.

3. A right circular cylinder is of infinite length in one direction and is homogeneous, the end of the cylinder, not at infinity, being perpendicular to the generators. Prove that the attraction at the centre of this end is  $2M/a$ , where  $M$  is the mass per unit length, and  $a$  is the radius.

If the cylinder be elliptic, and of the same density and the same mass per unit length as before, and of eccentricity  $e$ , then the attraction will be  $n$  times the former value, where

$$n = \frac{2}{\pi} (1 - e^2)^{\frac{1}{2}} \int_0^{\pi} \frac{d\theta}{\sqrt{1 - e^2 \sin^2 \theta}}$$

4. Find the potential and the attraction-components of a solid homogeneous spheroid of semi-axes  $a, a, c$ . (Consider the two cases,  $a > c$ ,  $a < c$ .)

5. Write a short note on the existence and the continuity of the second derivatives of the Newtonian potential function  $U$ , due to a certain surface or volume distribution of attracting matter. In the case of a volume distribution, find the abrupt changes in the values of

$$\frac{\partial^2 U}{\partial x^2}, \quad \frac{\partial^2 U}{\partial y^2}, \quad \frac{\partial^2 U}{\partial z^2}$$

in passing from just inside to just outside the volume, through a certain point  $P$  on the surface bounding the volume

Or,

State the characteristic properties of the Newtonian potential function: due to (i) a volume-distribution, (ii) a surface-distribution, of attracting matter.

If the potential  $U$  due to a certain distribution of attracting matter be such that  $U=0$ , at all points external to a given surface  $S$ , and  $U=\phi(x, y, z)$  at all points within  $S$ , where  $\phi$  is a single-valued continuous function, vanishing at all points upon  $S$ , then

(a) there is no attracting matter outside  $S$ ;

(b) there is a surface-distribution of matter upon  $S$ , of density

$$\sigma = \frac{1}{4\pi} \sqrt{(D_x \phi)^2 + (D_y \phi)^2 + (D_z \phi)^2}$$

(c) there is a volume-distribution of matter within  $S$ , of density

$$\rho = -\frac{1}{4\pi} (D_x^2 \phi + D_y^2 \phi + D_z^2 \phi).$$

## SECOND PAPER

*The questions are of equal value.*

### FIRST HALF

*Examiner*—MR. H. C. SENGUPTA, M.A.

N.B.—Candidates are required to answer THREE questions out of the five.

1. If any number of particles be moving in an ellipse about a force in the centre, and the force suddenly ceases to act, show that after the lapse of  $\frac{1}{2\pi}$ th part of the period of a complete revolution all the particles will be in a similar concentric and similarly situated ellipse.

2. Three rectangular moving axes  $OA, OB, OC$  forming a rigid system coincide at the time  $t$  with three fixed axes  $OX, OY, OZ$  and are rotating about them with angular velocity  $(\theta_1, \theta_2, \theta_3)$ .  $OP$  is a straight line fixed with respect to the moving system, having for its direction-cosines  $(l, m, n)$  at the time  $t$  with respect to the fixed system of axes. Find the values of

$$\frac{dl}{dt}, \frac{dm}{dt}, \text{ and } \frac{dn}{dt}.$$

3. A particle of mass  $m$  is moving on a smooth ellipsoid with velocity  $v$ . Prove that

$$R = \frac{mv^2}{\rho} - N,$$

where  $R$  is the pressure on the particle measured positively inwards,  $\rho$  the radius of curvature of the normal section whose tangent coincides with the direction of  $v$ , and  $N$  is the inward normal component of the impressed force.

4. Two heavy particles of masses  $m, M$  are attached to the points  $A, B$  of a light inextensible string, the upper extremity  $O$  being fixed. Prove by Lagrange's Method that the periods of the small lateral oscillations are  $\frac{2\pi}{p}$  and  $\frac{2\pi}{q}$ , where  $p$  and  $q$  are the roots of

$$\frac{1}{p^2} - \frac{a+b}{g} \frac{1}{p^2} + \frac{m}{M+m} \frac{ab}{g^2} = 0, \text{ where } OA=a \text{ and } AB=b.$$

5. Solve the preceding problem without applying Lagrange's Method.

## SECOND HALF

## (HYDROSTATICS)

*Examiner—DR. N. N. SEN, D.Sc.**Answer THREE questions only.*

1. Prove that no figure of equilibrium of a rotating homogeneous gravitating liquid of density  $\rho$  is possible if the angular velocity of rotation exceeds  $\sqrt{2\pi\rho}$ .

A homogeneous gravitating liquid rotates in a state of relative equilibrium in the form of an ellipsoid. Show that the mean pressure throughout the liquid is  $\frac{1}{3}$  of the pressure at the centre of the ellipsoid.

2. A triangular prism floats in water with its edges horizontal and base not immersed. Find its positions of equilibrium.

A thin cylindrical vessel of sectional area  $A$  floats upright being immersed to a depth  $h$  and contains water to a depth  $k$ . Discuss the stability of its equilibrium for small angular displacements. Prove that the work required to pump out the water from the cylinder is  $\rho A k(h-k)g$  units. ( $\rho$  = density of water.)

3. State the laws of Capillarity.

If the particles of a spherical soap bubble of radius  $r$  and tension  $t$  repel each other according to the law of inverse square of the distance, prove that  $V^2 = 16\pi r t$ ,  $V$  being the potential on the surface of the film.

4. A light rigid spherical shell of radius  $a$  contains a light gas in which the pressure is  $k$  times the density. The gas is repelled from a fixed external point  $O$  at a distance  $b$  from the centre, with a force per unit mass equal to  $\frac{k}{\text{distance}}$ . Prove that the pressure  $p$  at a distance  $X$  from  $O$  is given by

$$p = \frac{15b^2 XY}{4\pi a^3(5b^2 - a^2)},$$

where  $Y$  is the force which must be applied to the shell in order to keep it at rest.

5. Obtain the differential equation for determining the pressure at any point of a perfect fluid at rest under any forces and deduce the necessary condition of equilibrium.

A homogeneous liquid of density  $\rho$  is at rest under the forces whose components on a unit mass at  $(x, y, z)$  are

$$X = \frac{\mu x}{a^2}, \quad Y = \frac{\mu y}{b^2}, \quad Z = \frac{\mu z}{c^2}.$$

Find the resultant pressure on a portion of the surface

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$$

bounded by the planes of reference.



## THIRD PAPER.

*The questions are of equal value.*

## FIRST HALF.

*Examiner—Mr. B. C. DAS, M.Sc.**Answer ANY THREE.*

1. Shew that the principal axes of a given material system at any point are the normals to the three quadrics which pass through the point and belong to a certain confocal system.

If  $(l, m, n, \lambda, \mu, \nu)$  be the six co-ordinates of a principal axis and the associated Cartesian system be the principal axes at the centre of gravity, then shew that

$$A\lambda + Bm + Cn = 0.$$

2. A heavy rigid body can turn about a fixed horizontal axis. Determine the length of a simple equivalent pendulum.

If one point in the body is given through which the horizontal axis has to pass, discuss the problem of choosing the direction of the axis in the body in such a way that the simple equivalent pendulum shall have a given length; shewing that the axes which satisfy this condition are the generators of a quartic cone.

3. A solid uniform disc, of radius  $a$ , can turn freely about a horizontal axis through its centre, and an insect, of mass  $\frac{1}{n}$  that of the disc, starts from its lowest point and moves along the rim with constant velocity relative to the rim; shew that it will never get to the highest point of the disc if this constant velocity is less than  $\frac{2}{n} \sqrt{2ga(n+2)}$ .

4. If a hollow lawn tennis ball of elasticity  $e$  has on striking the ground, supposed perfectly rough, a vertical velocity  $u$  and an angular velocity  $\omega$  about a horizontal axis, find its angular velocity after impact and prove that the range of the rebound will be

$$\frac{4a\omega}{5g} eu,$$

$a$  being the radius of the ball.

5. A system begins to move from rest due to sudden yielding of some points of support. Discuss briefly the method of finding the initial radius of curvature of the path of any point of it.

A uniform smooth circular lamina, of radius  $a$  and mass  $M$ , movable about a horizontal diameter is initially horizontal, and on it is placed, at a distance  $c$  from the axis, a particle of mass  $m$ . Shew that the initial radius of curvature of the path of  $m$  is equal to  $12 \frac{mc^2}{Ma^2}$ .

## SECOND HALF.

*Examiner—Dr. N. N. SEN, D.Sc.**Answer ANY THREE.*

6. A rigid body moves continuously in space parallel to a fixed plane. Prove that the motion at any instant consists of pure rotation round an instan-

taneous axis, the position of which in space you are required to find in terms of the co-ordinates of the body.

A rigid body is set spinning about a horizontal axis through its centre of gravity, and then allowed to fall vertically. Show that the locus of the instantaneous axis of rotation relative to the body is a cylinder, the guiding curve of which is a spiral of Archimedes.

7. Obtain Euler's Dynamical Equations.

Deduce two first integrals of these equations for the case when the external forces are equivalent to a single force passing through the fixed point, and interpret these integrals.

If  $T$  be the kinetic energy,  $G$  the moment of the impressed forces about the instantaneous axis, and  $\Omega$  the resultant angular velocity, shew

$$\text{that } \frac{dT}{dt} = G\Omega.$$

8. Obtain Lagrange's equations for impulsive forces.

A disc at rest is acted on by an impulse in its own plane. Prove that the vis viva generated by the impulse is greater when the body is free than when it is constrained to turn round some fixed point.

9. A rod of length  $2l$  is constrained to move on the surface of a hyperboloid of revolution of one sheet with its axis of symmetry vertical, so that the rod always lies along a generator. If the rod start from rest, show that

$$r^2 - 2ar\dot{\theta} \sin \alpha + a^2\dot{\theta}^2 + \sin^2 \alpha \left( r^2 + \frac{1}{3}l^2 \right) \dot{\theta}^2 + 2g \cos \alpha (r - r_0) = 0$$

$$\text{and, } \left\{ a^2 + \sin^2 \alpha \left( r^2 + \frac{1}{3}l^2 \right) \right\} \dot{\theta} - a\dot{r} \sin \alpha = 0,$$

where  $r$  is the distance measured along a generator from the centre of gravity to the principal circular section,  $\theta$  is the eccentric angle of the point in which the generator meets the circular section,  $a$  is the radius of the circular section, and  $\alpha$  is the inclination of the rod to the vertical.

10. A heavy particle slides down the tube of an Archimedian screw, which is vertical and capable of turning about its axis. Determine the motion.

#### FOURTH PAPER.

*The questions are of equal value.*

#### FIRST HALF.

*Examiner*—MR. B. M. SEN, B.A. (CANTAB.), M.Sc. (CAL.).

*Not more than THREE questions may be attempted.*

1. Define the terms limit points and bounded sequence. Distinguish between limit points and limiting values of a sequence. Prove that the necessary and sufficient condition that a sequence  $z_n$  should have a limiting value is that corresponding to any given positive number  $\epsilon$  however small, it should be possible to find a number  $n$  such that

$$|z_{n+p} - z_n| < \epsilon$$

for all positive integral values of  $p$ .

Find the limit points and the limiting values if any of the sequences.

(a)  $z_n = \frac{1}{a+n}$  if  $n$  be odd

$z_n = \frac{1}{a-n}$  if  $n$  be even.

(b)  $z_n = n/n$  if  $n$  be odd

$z_n = \frac{1}{n}$  if  $n$  be even.

3. Test the following series for convergence :—

(a)  $\sum_{n=1}^{\infty} (1/\log n).$

(b)  $\sum_{n=1}^{\infty} \frac{1}{\sqrt{(n^2+n)}}.$

(c)  $\sum_{n=1}^{\infty} \frac{1}{1+a^n}.$

Prove that

$$1 - \frac{1}{2} + \frac{1}{3} - \frac{1}{4} + \frac{1}{5} - \frac{1}{6} + \frac{1}{7} - \frac{1}{8} + \frac{1}{9} - \frac{1}{10} + \frac{1}{11} - \frac{1}{12} + \dots = \frac{1}{2} \log 2.$$

3. Define uniform convergence of a series  $\sum u_n(x)$  for all values of  $x$  between  $x=a$  and  $x=b$ .

Discuss the convergence of sequence

$$S_n = \arctan nx, \text{ when } x \geq 0.$$

Prove that if the series

$$F(x) = \sum_n f_n(x)$$

is uniformly convergent in a closed interval,  $F(x)$  can be integrated term by term in that interval.

4. Prove by contour integration

(a)  $\int_0^{\infty} \frac{\cos x}{x^2+a^2} dx = \frac{\pi}{2a} e^{-a}.$

(b)  $\int_{-\infty}^{+\infty} e^{-x^2} \cos 2bx dx = \sqrt{\pi} e^{-b^2}.$

integrating  $e^{-z^2}$  along the rectangular contour formed by  $y=0$ ,  $y=b$ ,  $x=\pm R$ , and making  $R \rightarrow \infty$

5. Define the term poles, essential singularities, and branch points.

Prove Laurent's theorem that if  $f(z)$  be analytic in the region between two concentric circles with centre at  $a$  and on the circumference, it can be expanded in the form

$$f(z) = a_0 + a_1(z-a) + a_2(z-a)^2 + \dots$$

$$+ \frac{b_1}{z-a} + \frac{b_2}{(z-a)^2} + \dots$$

Shew that

$$\sin \left\{ u \left( z + \frac{1}{z} \right) \right\}$$

can be expanded in the series

$$a_0 + a_1 z + a_2 z^2 + \dots + \frac{b_1}{z} + \frac{b_2}{z^2} + \dots$$

in which the coefficients both of  $z^n$  and  $z^{-n}$ , are

$$\frac{1}{2\pi} \int_0^{2\pi} \sin(2u \cos \theta) \cos n\theta \, d\theta.$$

## SECOND HALF.

Examiner—DR. N. R. SEN, D.Sc., Ph.D.

Answer ANY THREE questions.

1. Obtain any sufficient condition or set of conditions you know of the convergence of Fourier series of an absolutely integrable function  $f(x)$ .

2. (a) Express  $f(x)$  as a series of sines of  $x$  and its multiples in the interval  $0 < x < \pi$  when

$$\begin{aligned} f(x) &= \frac{\pi}{3} \left( 0 < x < \frac{\pi}{3} \right) \\ &= 0 \left( \frac{\pi}{3} < x < \frac{2\pi}{3} \right) \\ &= -\frac{\pi}{3} \left( \frac{2\pi}{3} < x < \pi \right). \end{aligned}$$

Find the sum of the series you obtain at the points

$$0, \frac{\pi}{3}, \frac{2\pi}{3}, \pi.$$

(b) Prove that if

$$g(p) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} f(q) e^{-ipq} \, dq$$

then

$$f(q) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} g(p) e^{ipq} \, dp.$$

3. (a) Examine the singular points of the equation

$$z \frac{d^2 w}{dz^2} + \frac{dw}{dz} - w = 0$$

and discuss the integrals in the neighbourhood of the origin.

(b) Examine whether the hypergeometric equation

$$z(1-z) \frac{d^2 w}{dz^2} + \{ \gamma - (\alpha + \beta + 1)z \} \frac{dw}{dz} - \alpha\beta w = 0$$

is of the Fuchsian type.

4. (a) Obtain an integral of Bessel's equation in the form

$$J_{\lambda}(x) = \frac{1}{2\pi i} \int_C e^{\frac{x}{2}\left(u - \frac{1}{u}\right) - (\lambda+1)\log u} du$$

indicating clearly the path  $C$ , the real part of  $x$  being positive.

- (b) Prove the following identities :—

(i)  $\frac{d}{dx} (x^n J_n(x)) = x^n J_{n-1}(x)$  ( $n$  integer).

(ii)  $\int_0^\infty e^{-ax} J_0(bx) dx = (a^2 + b^2)^{-\frac{1}{2}}$ .

5. (a) Prove Rodrigue's formula for the Legendre's polynomial

$$P_n(z) = \frac{1}{2^n \cdot n!} \cdot \frac{\partial^n}{\partial z^n} (z^2 - 1)^n,$$

and also obtain the form

$$P_n(\cos \theta) = r^{n+1} \frac{(-1)^n}{n!} \frac{\partial^n}{\partial x^n} \left( \frac{1}{r} \right).$$

(b) Show that a diverging wave solution of the wave equation can be obtained in the form

$$\frac{e^{ik(ct-r)}}{r} \cdot f_n(ikr) \cdot S_n$$

where  $S_n$  is a spherical surface harmonic of the  $n^{\text{th}}$  order and  $f_n$  is a polynomial of the  $n^{\text{th}}$  degree in  $(ikr)^{-1}$  to be determined.

### FIFTH PAPER.

Not more than six questions are to be answered, of which two at least should be from Group B.

#### GROUP A.

Examiner—DR. S. D. GHOSH, D.Sc.

1. Prove the equation of continuity

$$\frac{\partial \rho}{\partial t} + \frac{\partial \rho u}{\partial x} + \frac{\partial \rho v}{\partial y} + \frac{\partial \rho w}{\partial z} = 0.$$

Show that all necessary conditions can be satisfied by a velocity potential of the form

$$\phi = ax^2 + by^2 + cz^2,$$

and a bounding surface of the form

$$F \equiv ax^4 + by^4 + cz^4 - \chi(t) = 0,$$

where  $\chi(t)$  is a given function of time and  $a, b, c$  suitable functions of time.

2. Obtain the equations of motion of a fluid in Euler's form. How are these equations supplemented to make the general problem definite?

Steam is rushing from a boiler, through a conical pipe, the diameters of the ends of which are  $D$  and  $d$ ; if  $V$  and  $v$  be the corresponding velocities of the steam, and if the motion be supposed to be that of divergence from the vertex of the cone, prove that

$$v = \frac{D^2}{d^2} \sqrt{\frac{v^2 - V^2}{2k}},$$

where  $k$  is the pressure divided by the density, and supposed constant.

3. An infinitely long circular cylinder is moving perpendicular to its length in an infinite mass of liquid at rest at infinity and there is a cyclic motion about the cylinder. Find the velocity potential and shew that the stream lines relative to the cylinder are

$$\left( r - \frac{a^2}{r} \right) \sin \theta + A \log r = \text{constant},$$

where  $a$  is the radius of the cylinder and  $A$  some constant to be determined.

An infinitely long cylinder whose cross-section is composed of the exterior portions of two equal circles (of radius  $a$ ) cutting orthogonally, is surrounded by an infinite mass of liquid. If the cylinder be set in motion with velocity  $u$  perpendicular to its generators in the direction of the line of centres of a cross-section shew that the velocity potential is

$$ua^2 \left[ \frac{\cos \theta}{r} - \frac{\cos \Theta}{2R} + \frac{\cos \theta'}{r'} \right],$$

where  $r, r', R$  are the radii vectors of a point lying on the plane of the section, measured respectively from the centres of the two circles and the point midway between them and  $\theta, \theta', \Theta$  are the angles which the radii vectors make with the direction of motion.

4. A solid revolution is moving uniformly along its axis in an infinite mass of liquid. Discuss the stability of the motion.

Shew that when an oblate spheroid moves uniformly along its axis in an infinite mass of liquid the motion is stable, but for a prolate spheroid, the motion is unstable.

5. Investigate the behaviour of two thin parallel rectilinear vortex filaments in an infinite mass of incompressible fluid. Discuss the case when the strengths of the vortices are equal but of opposite signs and hence deduce the motion of a rectilinear vortex filament in an infinite mass of incompressible fluid bounded on one side by a rigid wall parallel to the vortex filament.

When an infinite liquid contains two parallel rectilinear vortices, the magnitude and sense of spin being the same in both, shew that the stream lines relative to the vortices are given by

$$\log (r^4 + b^4 - 2r^2b^2 \cos 2\theta) - \frac{r^2}{2b^2} = \text{constant},$$

$\theta$  being measured from the join of the vortices, the origin being its middle point and  $2b$  the distance between the vortices.

6. Simple harmonic waves are propagated along a straight canal of very great depth. Find the velocity potential  $\phi$  and shew that the velocity of waves of length  $\lambda$  is given by

$$v^2 = \frac{g\lambda}{2\pi}.$$

Shew further that the potential energy of a wave consisting of a single elevation and a single depression is equal to its kinetic energy.

## GROUP B.

*Examiner*—DR. S. C. KAR, M.A., PH.D.

7. Discuss the nature of motion in the neighbourhood of the origin, when  $f(z)$  being continuous, finite and one-valued in that neighbourhood,

$$(1) \frac{dw}{dz} = \frac{m}{z} + f(z)$$

$$(2) \frac{dw}{dz} = \frac{im}{z} + f(z)$$

$m$  being real and  $w = \phi + i\psi$  and  $z = x + iy$ .

In the part of the infinite plane bounded by a circular quadrant  $AB$  and the productions of the radii  $OA, OB$ , there is a two-dimensional motion due to the production of liquid at  $A$  and its absorption at  $B$ , at the uniform rate  $m$ . Find the stream function in polar co-ordinates referred to  $O$  as origin and  $OA$  as the initial line.

8. A given mass of liquid at rest is bounded internally and externally by two spherical surfaces. If the boundaries have prescribed velocities or are subjected to given impulses, prove that there is only one form of irrotational motion possible. What happens when the boundaries are two infinite cylinders?

A solid is projected in an infinite mass of incompressible fluid initially at rest. Will it come to rest? Give reasons for your answer.

9. An ellipsoid is moving in an infinite mass of liquid at rest at infinity, in the direction of one of its axis with a given velocity. Find the velocity potential of the liquid motion.

A spheroid is surrounded by an infinite mass of liquid at rest, when suddenly a blow  $P$  is given to it along the axis of revolution. Find the motion of the spheroid.

10. Between the fixed boundaries

$$\theta = \frac{\pi}{2n} \text{ and } \theta = -\frac{\pi}{2n},$$

there is a two-dimensional liquid motion due to a source at the point ( $r=c$ ,  $\theta=\alpha$ ) and a sink at the origin absorbing liquid at the same rate as the source produces it. Find the stream function and shew that one of the stream lines is a part of the curve.

$$r^{2n} - 2c^n r^n \sin n\alpha \sin n\theta = c^{2n} \cos 2n\theta.$$

## SIXTH PAPER.

*The questions are of equal value.*

N.B.—Answer THREE questions from EACH half.

## FIRST HALF.

*Examiner*—MR. B. B. SEN, M.Sc.

1. If  $\phi$  and  $\phi'$  be the geographical and the geocentric latitude of a place respectively, prove that

$$\phi' = \phi - \frac{e^2}{2-e^2} \operatorname{cosec} 1'' \sin 2\phi + \frac{1}{2} \frac{e^4 \operatorname{cosec} 1''}{(2-e^2)^2} \sin 4\phi,$$

approximately, where  $e$  is the eccentricity of the meridian section of the earth.

Show that the radius of the earth at a given latitude  $\phi$  is

$$a \sqrt{\frac{\cos \phi}{\cos (\phi - \phi') \cos \phi'}}$$

$a$  being the equatorial radius.

2. The altitudes of a given star when it crosses the meridian and the prime vertical of a place are  $\alpha$  and  $\alpha'$  respectively; show that if  $\delta$  be the declination of the star and  $\phi$  the latitude of the place,

$$\begin{aligned}\cot \delta &= \sec \alpha \operatorname{cosec} \alpha' - \tan \alpha, \\ \cot \phi &= \tan \alpha - \sec \alpha \sin \alpha'.\end{aligned}$$

Show that for a small error in the measurement of altitude at a given place, the corresponding error in the measurement of hour-angle will be least when the star is on the prime vertical.

3. Obtain Bradley's formula for refraction in the form.

$$r = A \tan \left( z - \frac{nr}{2} \right).$$

If  $r$  be the horizontal refraction, show that the point of the compass where the sun rises is shifted through a distance.

$$r \cdot \frac{\sin \phi}{(\cos^2 \phi - \sin^2 \delta)^{\frac{1}{2}}},$$

where  $\phi$  is the latitude.

4. When the sun's longitude is  $l$ , if  $E$  be the equation of time (expressed in angle) due to the obliquity of the ecliptic ( $\omega$ ) alone, show that

$$\cot E = -\cot 2l - \cot^2 \frac{\omega}{2} \operatorname{cosec} 2l.$$

Show that  $E$  has got the greatest value when

$$\tan l = \sqrt{\sec \omega}$$

and

$$\tan \alpha = \sqrt{\cos \omega},$$

$\alpha$  being the R.A. of the sun.

5. Show that  $\Delta \alpha$  and  $\Delta \delta$ , the annual changes in the R.A. and the declination of a star due to precession are given by

$$\begin{aligned}\Delta \alpha &= 50''.2 (\cos \omega + \sin \alpha \tan \delta \sin \omega) \\ \Delta \delta &= 50''.2 \cos \alpha \sin \omega.\end{aligned}$$

Prove that the points on the celestial sphere where the correction to R.A. for precession and nutation is zero on any given day lie on a cone.

## SECOND HALF.

Examiner—DR. N. N. SEN, D.Sc.

6. Two planets move in non-coplanar circular orbits of radii  $a$  and  $b$  round the sun. Find their angular distance as seen from the sun when they appear stationary with respect to each other.

Show that the number of times an inferior planet appears to change from direct motion to retrograde motion in the course of one revolution of the superior planet round the sun is the integral part of

$$\left( \frac{b}{a} \right)^{\frac{2}{3}} \text{ or of } \left( \frac{b}{a} \right)^{\frac{2}{3}} - 1,$$

where  $a$  and  $b$  are radii of the orbits supposed coplanar and  $b > a$ .



7. An equatorial telescope whose axis is adjusted to the apparent pole is pointed to a star very near the meridian. Show that if the telescope is to follow the star accurately, the rate of the clock must be diminished in the ratio.

$$1 - k \cot \phi \tan z : 1,$$

where  $\phi$  = latitude of the place of observation and  $k$ , the co-efficient of refraction.

8. Find the amount of aberration in declination and R.A. of a star.

If two planets move in coplanar circular orbits of radii  $a$  and  $b$  respectively round the sun, show that aberration of one as seen from the other will be less in conjunction than in opposition in the ratio

$$\frac{\sqrt{a} - \sqrt{b}}{\sqrt{a} + \sqrt{b}}.$$

9. In a horizontal sun-dial of the usual form show that the locus traced out by the end of the shadow of the style during one day is approximately a conic section of eccentricity.

$$\cos(\text{latitude}) \operatorname{cosec}(\text{declination of sun}).$$

10. Prove that the interval between the sun's transit and its culmination is

$$\frac{12m}{\pi} \{ \tan \phi - \tan \delta \} \text{ hrs.,}$$

where  $\phi$  = the latitude of the place;  $\delta$  = declination of the sun; and  $m$  = ratio of sun's motion in declination to its apparent motion in hour-angle.

If daylight be considered to begin and terminate when the sun is  $\theta$  degrees below the horizon, prove that there are two latitudes which have the same duration of daylight,  $\theta$  being numerically greater than the declination of the sun.

## SEVENTH PAPER.

### (ELASTICITY—FIRST PAPER)

*The questions are of equal value.*

#### FIRST HALF.

*Examiner—MR. K. KHASTGIR, M.Sc.*

*Attempt THREE questions only.*

1. Obtain the equation of the strain quadric and discuss its properties.

Prove that the expression

$$\frac{3 \iiint (u^2 + v^2 + w^2) dX dY dZ}{\iiint (X^2 + Y^2 + Z^2) dX dY dZ} = e_{xx}^2 + e_{yy}^2 + e_{zz}^2 + \frac{1}{2} \left( e_{xx}^2 + e_{yy}^2 + e_{zz}^2 \right) + 2 \left( \tilde{w}_{xx}^2 + \tilde{w}_{yy}^2 + \tilde{w}_{zz}^2 \right),$$

$u, v, w$  being the relative elastic displacements at a point  $(x, y, z)$  and the integrations being taken through a very small sphere with its centre at the point  $(x, y, z)$ .

2. Prove that any elastic displacement  $(u, v, w)$  can be expressed as the sum of a gradient of a scalar function  $(\phi)$  and the curl of a vector function  $(F, G, H)$ .

3. If  $V$  be the potential of a system of electric charges, determine the stress-system so that the traction across the tangent plane to the equipotential surface at the point is tension of amount  $\frac{R^2}{8\pi}$ ,  $R$  being the resultant electric force at the point.

4. Establish the stress equations of equilibrium and express them in terms of the displacements when the body is isotropic.

Prove that, when there are no body forces

$$\nabla^2 X_x + \frac{1}{1+\sigma} \frac{\partial^2 \Theta}{\partial x^2} = 0$$

where

$$\Theta = X_x + Y_y + Z_z.$$

5. A body  $S$  is subjected to surface tractions only. Prove that the rate of increase of energy within  $S$  is equal to the rate at which work is done by the traction across  $S$ .

## SECOND HALF.

*Examiner*—DR. S. D. GHOSH, D.Sc.

*Attempt THREE questions only.*

1. Prove that in an isotropic solid of volume  $V$ , the average value of  $\Delta$  is

$$\frac{1}{3kV} \iiint \rho(Xx + Yy + Zz) dx dy dz$$

$$+ \frac{1}{3kV} \iint (X_x x + Y_y y + Z_z z) dS.$$

A vessel of any form, of internal volume  $V_1$  and external volume  $V_2$ , is subjected to internal pressure  $p_1$  and external pressure  $p_2$ . Shew that its total volume will be diminished by the amount

$$\frac{p_2 V_2 - p_1 V_1}{k}.$$

2. Show how to determine the elastic displacements in an isotropic medium produced by the application of force within a small region.

3. Find the elastic displacements at any point of a body bounded by an infinite plane produced by pressure distributed over an area on the bounding plane.

4. Give a description of the method of series and the method of singularities as applied to the solution of potential problems.

5. A semi-infinite body bounded by the plane  $z=0$  has displacements  $(u, v, w)$  given all over the plane face. Find the displacements at any point in the body.

## EIGHTH PAPER.

## (ELASTICITY—SECOND PAPER)

*The questions are of equal value.*

## FIRST HALF.

*Examiner—DR. J. M. GHOSH, D.Sc.**Attempt THREE questions only.*

1. Solve the torsion-problem for an isotropic elastic prism whose cross-section is a rectangle.

2. A beam of isotropic material is bent by a terminal load. Specify the corresponding stress-system at any point and the condition satisfied by it.

The boundary of the cross-section of a beam of isotropic material is an ellipse. Find the corresponding flexure-function.

3. Obtain the equations of equilibrium of a thin elastic naturally straight rod bent and twisted into any form.

How will the equations be modified if the rod were naturally curved?

4. State the problem of the *elastica* and explain its kinetic analogy with the motion of a pendulum.

Work out the problem of *small* buckling of a thin rod by forces applied at its ends in a direction parallel to that of the rod in the unstressed state.

5. A long thin rod is set up in a vertical plane so that the lower end is constrained to remain vertical. Shew that the rod will be bent by its own weight if its height exceeds a certain maximum.

## SECOND HALF.

*Examiner—DR. S. D. GHOSH, D.Sc.**Attempt THREE questions only.*

1. Prove that the solution of the problem of free vibration of elastic bodies which start from given conditions of displacement and velocity is unique.

If  $(u, v, w)$  and  $(u_1, v_1, w_1)$  be any two sets of normal functions corresponding to two normal modes of free vibration of an elastic solid, shew that

$$\iiint \rho(u, u_1 + v, v_1 + w, w_1) dx dy dz = 0.$$

where  $\rho$  is the density of the body and the integration is taken throughout the entire volume.

2. Shew that in an infinite isotropic solid body two kinds of waves can travel and find their velocities.

Solve the characteristic equation in the case of spherical waves.

3. Find the form of the wave surface in an infinite elastic medium when the strain-energy function  $W$  is given by

$$2W = A \Delta^2 + L(e_{xx}^2 - 4e_{xy}e_{xx}) + M(e_{xx}^2 - 4e_{xx}e_{yy}) + N(e_{xy}^2 - 4e_{xx}e_{yy}).$$

4. Discuss the problem of flexural vibrations of a thin rod clamped at both ends.

5. Obtain the frequency equation for radial vibrations of a sphere complete up to the centre.

## SEVENTH PAPER

## (TIDES AND SURFACE WAVES—FIRST PAPER)

*The questions are of equal value.*

*Attempt six questions altogether, THREE from each half.*

## FIRST HALF

*Examiner—DR. J. M. GHOSH, D.Sc.*

1. Establish the equation of free tidal waves in the form

$$\frac{\partial^2 \zeta}{\partial t^2} = gh \frac{\partial^2 \zeta}{\partial x^2}$$

and point out fully the assumptions on which it is based.

Work out the case of *forced* oscillations in a canal closed at one end and communicating at the other with an open sea in which a periodic oscillation is maintained.

2. Assuming that the moon's orbit lies in the plane of the equator, find the tidal elevation in a circular canal parallel to the equator.

Discuss briefly the nature of the tide.

3. Obtain the equation of wave-motion in a canal of variable cross-section.

Work out the case of a canal whose breadth is constant but whose depth varies according to the law

$$h = h_0 \left( 1 - \frac{x^2}{a^2} \right),$$

$x$  being measured in the direction of the length.

4. Obtain the expression for elevation in the case of tidal oscillations in a circular basin which shelves gradually from the centre to the edge according to the law

$$h = h_0 \left( 1 - \frac{r^2}{a^2} \right)$$

Discuss specially the symmetrical modes of oscillation.

5. A spherical sheet of water of uniform depth surrounds a solid globe. Shew that, for free oscillations, the tidal elevation may be expressed as a general surface harmonic.

Discuss also the effect of a simple harmonic disturbing force and also of the mutual attraction of the parts of the liquid.

## SECOND HALF

*Examiner—DR. S. C. KAR, M.A., D.Sc.*

6. Compare briefly the method adopted by Hough to solve the tidal equation with that employed by Laplace.

Prove the recurrence-equations :—

$$(i) \quad \frac{dP_{n+1}}{d\mu} - \frac{dP_{n-1}}{d\mu} = (2n+1)P_n,$$

$$(ii) \quad \frac{1}{\sin^2 \theta} \left[ \left( \sin \theta \frac{d}{d\theta} \right)^2 - m^2 \right] P_n = -n(n+1)P_n.$$

7. Shew how a solution in the form of a power series may be obtained of the tidal equation,

$$\frac{d}{d\mu} \left\{ \frac{1-\mu^2}{f^2-\mu^2} \frac{d\zeta}{d\mu} \right\} + \beta\zeta = \beta H(\mu^2 - \frac{1}{3}),$$

for a sea covering the whole globe.

8. Obtain the tide-producing potential and explain how the lunar tide may be analysed broadly into three types.

9. Prove that tidal elevations travel faster than tidal depressions and that steady motion may be only approximately realised.

10. What is laminar motion of liquids? Shew in the light of such motion that the effect of viscosity on tides should be imperceptible beyond a very short distance above the bed.

### EIGHTH PAPER

#### (TIDES AND SURFACE WAVES—SECOND PAPER)

Examiners— { DR. S. C. KAR, M.A., D.Sc.  
                  , H. D. GHOSH, D.Sc.

Six questions to be attempted.

1. Determine the velocity of propagation  $V$ , of waves of length  $\lambda$ , along a canal of depth  $h$  in terms of gravitational and capillary forces, neglecting the density of air above, and shew that, for such waves on deep water, there is a wavelength  $\lambda_0$  for which the velocity is a minimum.

Shew that for waves on deep water under gravitational and capillary forces, the group velocity is greater or less than the wave velocity according as  $\lambda$  is less or greater than  $\lambda_0$ .

2. Give Korteweg and De Vries' theory of a system of oscillatory waves of finite height in a canal of limited depth.

3. Investigate the two-dimensional oscillations of water in a canal whose cross-section consists of two straight lines inclined at  $60^\circ$  to the vertical.

4. A stream is flowing with uniform velocity  $V$  in the direction of  $x$ -axis over a corrugated bed whose section is given by

$$z = -h + \gamma \cos kx.$$

Find the stationary waves on the free surface and shew that the ridges of the free surface are vertically over the ridges or hollows of the bed of the stream according as  $V$  is greater or less than the velocity in still water of depth  $h$ , of waves of the same length  $\frac{2\pi}{k}$  as the corrugations.

5. Give Kelvin's idea of wave-pattern produced by the motion of ships. Obtain the cartesian equation of the wave-curves and give a rough sketch of them.

6. Prove that the stream function

$$\psi = c(z - ke^{kt} \cos kx)$$

may represent a steady wave motion of finite amplitude and that in that case the wave velocity varies with the amplitude.

Shew further that with such waves the wave-crest may, in an extreme case, show a sharp angle of  $120^\circ$ .

7. Shew that the two-dimensional motion of a viscous liquid may be described by two functions, one of which is harmonic.

With waves on the free surface of a viscous liquid of infinite depth, shew that the motion is rotational and the vorticity diminishes from the surface downwards.

8. Two immiscible liquids of different densities rest, one on the top of another, and flow with different velocities. Find the velocity-potential of either for steady wave-motion.

Discuss the problem of the flapping of sails in a wind.

9. A ship is moving with velocity  $c$  ( $< \sqrt{gh}$ ) through still water of depth  $h$ . Assuming that the only disturbance of water, that survives at a great distance is a simple harmonic one in the wake of the ship, explain how the resistance encountered by the ship may be obtained in the form

$$R = \frac{1}{4} g \rho a^2 \left\{ 1 - \frac{4\pi h}{\lambda \sinh \frac{2\pi h}{\lambda}} \right\},$$

where  $\lambda$  is the wavelength corresponding to the velocity  $c$ .

10. The free surface of a large extent of water is supposed to have an initial deformation given by

$$\zeta = f(x) = \frac{Q}{\pi} \cdot \frac{b}{b^2 + x^2}.$$

Prove that at any subsequent time the disturbance would be given by

$$\zeta = \frac{Q}{\pi} \int_0^\infty \cos \sigma t e^{-k^2 b} \cos kx \, dk. \quad [\sigma^2 = gk].$$

Shew further that this disturbance at the origin will only die out in infinite time.

## SEVENTH PAPER

### (ADVANCED ASTRONOMY—FIRST PAPER)

*The questions are of equal value.*

*N.B.—Answer SIX questions, THREE from EACH half.*

#### FIRST HALF

*Examiner—DR. N. N. SEN, D.Sc.*

1. Explain why the arithmetic mean of series of measurements of a quantity is taken to be the most probable value of that quantity.

If  $e_1, e_2, e_3, \dots$  be mean errors of the independent quantities  $x, y, z, \dots$ , find the mean error of

(i)  $ax \pm by \pm cz \pm \dots$

(ii)  $f(x, y, z, \dots)$ .

If  $e$  be the probable error of each of the measurements of a quantity, find the probable error of their arithmetic mean.

2. There are two walls of equal height  $h$  at right angles to each other and running in known directions. Show how to find the sun's altitude and azimuth by observing the breadth of the shadows of the two walls at a given time, and prove that the sum of the squares of the breadths of the shadows will be the same whatever be the directions of the walls.

3. Obtain the differential formula for refraction on Bessel's hypothesis.

Calculate the curvature of the refracted ray at the position of the observer.

4. Assuming the moon to be an oblate spheroid, show that the apparent curve of illumination is composed of two semi-ellipses whose equations you are to obtain.

5. Assuming the spheroidal form of the Earth, establish dynamically the phenomenon of precession and nutation as caused by solar attraction. Find the eccentricity of the ellipse described by the celestial pole due to solar nutation.

## SECOND HALF

*Examiner*—DR. D. N. MALLIK, B.A., Sc.D., F.R.S.E.

6. Give an account of stellar evolution as evidenced by existing types and show that the nebular hypothesis fairly well accounts for stellar evolution but not that of the solar system.

7. Explain how you would determine the longitude of a place from an observation of the eclipse of the sun.

Investigate the correction of longitude for error in the elements of computation.

8. Find the position of the points to which stars aberrate taking account of the eccentricity of the earth's orbit.

Verify that the dimensions of the aberrational ellipse are unaffected by eccentricity.

9. Assuming that the diameters of the earth and Venus are negligible, show that the heliocentric elongation ( $\psi$ ) of Venus from the earth at the moment of the commencement or the end of a transit is given accurately by

$$b^2 r^2 \cos^2 \psi - 2brR^2 \cos \psi + R^2(b^2 + r^2) = b^2 r^2,$$

where  $R$  is the sun's radius, and  $b$ ,  $r$  the distances of Venus and the earth from the sun's centre.

10. Investigate the relation between the mean and apparent places of stars at any time.

Explain how the apparent place of a star can be derived from the catalogues.

## EIGHTH PAPER

(ADVANCED ASTRONOMY—SECOND PAPER)

*The questions are of equal value*

*N.B.—Answer six questions, THREE from EACH half.*

## FIRST HALF

*Examiner*—DR. HRISHIKESH SARKAR, D.Sc.

1. Explain the theory of Map-making. Calculate the conditions that a Map shall be conformal. Defining stereographic projection in the usual way, prove that it is a conformal representation. Shew that it can be derived from Mercator's projection. Obtain a general formula for stereographic projection and deduce that the stereographic projection of any circle on a sphere is also a circle.

2. Define occultation. Obtain an equation to calculate the time of commencement or ending of an occultation of a star by the moon, and have an approximate solution of your equation. Find the points on the moon's limb at which the star disappears and reappears.

3. Derive a rigorous differential equation for refraction in the form

$$dR = \frac{d\mu}{\mu} \frac{\sin z}{\sqrt{\frac{\mu^2}{\mu_1^2} \frac{r^2}{a^2} - \sin^2 z}}$$

Assuming  $\mu^2 - 1 = 2c\rho$  and  $\frac{r}{a} = 1 + \frac{h_1}{a}x$ ,

transform the above equation in the form

$$R = Am \tan z, \text{ where } m = \int_0^1 \frac{dw}{\sqrt{1 + 2u \sec^2 z}}$$

$x$  denoting  $1 - \frac{\rho}{\rho_1}$ , and  $u$  representing a function of  $x$  and  $w$ , which is to be exhibited.

Developing  $m$  in the form

$$m = 1 - m_1 \sec^2 z + m_2 \sec^4 z \dots \dots \dots,$$

calculate  $m_1$  on any hypothesis and  $m_2$  on Ivory's hypothesis.

4. Prove that the effects of annual parallax in a star  $S$  which has a parallax  $\sigma$ , on the distance  $D$  and the position angle  $p$  of an adjacent star  $S'$  which has no parallax are given by

$$D' = \sigma m \cos (\odot - M)$$

$$p' = \sigma m' \cos (\odot - M') \operatorname{cosec} D,$$

where  $\odot$  is the longitude of the sun and  $m, M$  and  $m', M'$  are auxiliary quantities to be specified.

Shew that the greatest variation in the apparent distance of the two stars  $S$  and  $S'$  is  $2\sigma (\sin^2 \beta \cos^2 B + \sin^2 \beta)^{\frac{1}{2}}$  where  $\beta$  is the latitude of  $S'$  and  $B$  is the angle which  $S'$  and either pole of the ecliptic subtends at  $S$ .

5. If  $(\alpha, \delta)$  denote the place in time  $t$  corresponding to the mean place  $(\alpha_0, \delta_0)$  of a star, due to the effects of precession and proper motion, shew that

$$\alpha = \alpha_0 + (p_\alpha + \mu_\alpha) t + \frac{1}{2} t^2 D_\alpha,$$

$$\delta = \delta_0 + (p_\delta + \mu_\delta) t + \frac{1}{2} t^2 D_\delta,$$

where  $p_\alpha = m + n \sin \alpha_0 \tan \delta_0$ ,  $p_\delta = n \cos \alpha_0$

$$m = k \cos \omega, n = k \sin \omega$$

$$D_\alpha = \frac{dm}{dt} + \frac{dn}{dt} \sin \alpha_0 \tan \delta_0 + n(p_\alpha + 2\mu_\alpha) \cos \alpha_0 \tan \delta_0$$

$$+ n(p_\delta + 2\mu_\delta) \sin \alpha_0 \sec^2 \delta_0 + 2\mu_\alpha \mu_\delta \tan \delta_0,$$

$$D_\delta = \frac{dn}{dt} \cos \alpha_0 - n(p_\alpha + 2\mu_\alpha) \sin \alpha_0 - \frac{\mu_\alpha^2}{2} \sin 2\delta_0,$$

$k$  is the constant of precession,  $\omega$  the obliquity of the ecliptic, and  $\mu_\alpha, \mu_\delta$  are the proper motions in R.A. and declination respectively, expressions for which you are to find.



## SECOND HALF

*Examiner*—DR. N. N. SEN, D.Sc.

6. Show that the altitudes of two known stars at a known Greenwich time are sufficient to determine the latitude and longitude of the place of observation.

If the stars chosen for observation are on opposite sides of the meridian at azimuths  $A_1$  and  $A_2$ , and the observed altitudes are both erroneous to the extents  $\epsilon_1$  and  $\epsilon_2$  respectively, find the errors in latitude and longitude.

7. Prove that the parallax diminishes the moon's azimuth by  $\frac{e^3}{2} \sin 2\phi \sin \pi' \phi \sin a \operatorname{cosec} z$  approximately where  $e$  is the eccentricity of the earth,  $\phi$  of the latitude and  $\pi' \phi$  moon's horizontal parallax, and  $a$  the azimuth of the moon.

8. Explain the method of determining unknown quantities from observations when the quantities are connected by rigorous equations.

The angles of a plane hexagon are found to be  $x_1, x_2, x_3, \dots, x_n$ , with weights  $w_1, w_2, \dots, w_n$  respectively. Find the most probable values of the angles.

9. What are variable stars? Explain how the distances of 'Island Universes' are estimated.

Describe, as briefly as possible, the planetesimal Hypothesis of the Evolution of the Solar System.

10. Explain the 'Tidal Evolution Theory' for the Earthmoon System. Does it apply to the whole of the Solar System? What is the future history of the moon according to the Tidal Theory?

## SEVENTH PAPER

(GEODESY AND GEOPHYSICS—FIRST PAPER)

*Examiners*— $\left\{ \begin{array}{l} \text{DR. S. D. GHOSH, D.Sc.} \\ \text{,, N. R. SEN, D.Sc., Ph.D.} \end{array} \right.$

*The questions are of equal value.*

*Not more than six questions are to be answered.*

1. Shew that the length of a meridian arc between two stations on the surface of the earth is given by

$$S = a(1 - \frac{1}{2}e^2) \Delta \lambda - \frac{3}{2}ae^2 \sin \Delta \lambda \cos 2\lambda_0,$$

where  $\Delta \lambda$  is the difference between the latitudes of the two stations and  $\lambda_0$  the mean of their latitudes.

Shew how to obtain the dimension of the earth from the measurement of two meridian arcs. Is this method accurate?

2. Four observations of equal weight give the following equations

$$x + y + z = 7$$

$$x + y - 3z = -6$$

$$x + 2y - z = 3$$

$$3x - y + z = 4$$

Find the best values of the quantities  $x, y, z$ .

3. What are the essential features of Mercator's projection in map-making? Establish the formulae for this projection.

If  $\beta$  is small enough for  $\tan^2 \frac{1}{2}\beta$  to be neglected, show that the difference of the distances of a place, whose latitude is  $\beta$ , from the equator on the Mercator's chart, and on a chart obtained by projecting from the centre of the earth on the enveloping cylinder touching the earth along the equator is

$$\left(\frac{1}{3} \tan^3 \frac{1}{2}\beta\right) \times (\text{the earth's diameter}).$$

4. Explain how you will calculate the difference of longitude between two stations from geodetic data.

Describe a method for the location of a parallel of latitude on the surface of the earth.

5. What do you understand by "the deflection of the vertical at a station"? Calculate this deflection.

What are Laplace points?

6. Describe briefly the methods used for the determination of the value of  $g$  at a station.

7. Prove Clairaut's theorem

$$g = g_0 \left\{ 1 + \left( \frac{1}{2} m - e \right) \sin^2 \phi \right\},$$

where  $\phi$  is the latitude. How is the figure of the earth deduced from Clairaut's theorem?

8. Describe the method of trigonometrical levelling. Obtain a formula for the determination of the difference of heights between two stations by this method.

9. Describe briefly the operations to be carried out for the measurement of an arc on the surface of the earth, mentioning the points to be noted in this connection.

$PQ$  is a portion of a base-line  $AB$  which is to be measured. If  $b$  be the length of  $PQ$ ,  $i$  the small angle which  $PQ$  makes with the horizontal plane at  $P$ ,  $h$  the height of  $P$  above the reference ellipsoid whose radius of curvature at the point just below  $P$  is  $R$ ; prove that the length of the arc  $AB$  when reduced to the reference ellipsoid will be

$$sb - \frac{1}{2} s b i^2 - \frac{b h}{R}.$$

## EIGHTH PAPER

(GEODESY AND GEOPHYSICS—SECOND PAPER)

Examiners— $\left\{ \begin{array}{l} \text{DR. S.'D. GHOSH, D.Sc.} \\ \text{,, S. C. KAR, M.A., Ph.D.} \end{array} \right.$

*The questions are of equal value.*

*Not more than six questions are to be answered.*

1. What are Green's functions? Shew how with their help you can determine the value of the potential  $V$  at any point of an infinite space outside a surface  $S$  which completely encloses all attracting matter, when the value of either

$V$  or  $\frac{\partial V}{\partial n}$  is given at every point on the surface  $S$ .

2. Obtain Clairaut's differential equation for the ellipticity of the Earth's strata of equal density in the form

$$\frac{d^2\epsilon}{dr^2} + \frac{6\rho r^2}{S(r)} \frac{d\epsilon}{dr} - \left(1 - \frac{\rho r^3}{S(r)}\right) \frac{6\epsilon}{r^3} = 0.$$

3. Assuming the differential equation in Question 2 or otherwise, prove that the ellipticities of the strata of equal density increase steadily from the centre to the surface.

4. Describe Eötvös torsion balance and shew how the second differential coefficients of the earth's potential can be measured by it.

5. Obtain Bouguer's correction of the value of  $g$  in the form

$$\delta g = -\frac{3}{2} \frac{\rho}{\rho_m} \cdot \frac{h}{R} g.$$

What do you understand by isostasy? Describe the theories of isostatic compensation.

6. How is the mean density of the earth determined? Describe briefly the various methods used by different investigators for this purpose.

7. Write a short essay on "Earth-quake waves."

8. Explain clearly what you understand by "time curves" and "angle of emergence". How is the angle of emergence determined? What is its importance in seismic calculations?

9. In a canal of uniform section, when in addition to gravity a small disturbing force  $X$  acts on the liquid parallel to the length of the canal, shew that the equation of motion is

$$\frac{\partial^2 \xi}{\partial t^2} = gh \frac{\partial^2 \xi}{\partial x^2} + X.$$

Assuming that the moon's orbit is circular and coincident with the plane of the earth's equator, discuss the tidal oscillations in a canal coincident with the equator.

## SEVENTH PAPER

### (ELECTRICITY—FIRST PAPER)

Examiners— { MR. S. N. BOSE, M.Sc.  
DR. N. R. SEN, D.Sc., Ph.D.

*The questions are of equal value.*

*Answer ANY SIX questions.*

1. Write a short note on the application of the method of inversion in electrostatic problems. Apply the method to obtain the distribution of electric charges on a sphere put to earth under the influence of a point charge at an external point  $P$ .

2. Enunciate and prove Thompson's theorem of minimum energy for an electrostatic field. Calculate the capacity and energy of a cylindrical condenser and show that when the two coaxial cylinders are very close compared to their radii the expression for capacity is the same as for a plate condenser.

3. Show that the work done by the forces in an electrostatic field for a small displacement  $q$  of a dielectric material with dielectric constant  $\epsilon$  is given by the integral

$$\int \left( q \cdot \rho E - \frac{1}{8\pi} E^2 \nabla \epsilon \right) dv,$$

where  $E$  is the electric intensity due to a volume distribution of charges of density  $\rho$ .

4. Enunciate the laws of Kirchoff regarding the flow of electricity in a network of conductors, and prove that the current which flows from  $A$  to  $B$  when an electromotive force  $E$  is introduced into the arm  $CD$  of a network is equal to the current in the arm  $CD$  when the same electromotive force is introduced in  $AB$ .

5. Define permeability and susceptibility of a magnetic material.

A solid ellipsoid of soft iron, semi-axes  $a$ ,  $b$ , and  $c$  and permeability  $\mu$  is placed in a uniform field of force  $X$  parallel to the axis of  $x$  which is the direction of the major axis. Verify that the internal and external potential of induced magnetisation are

$$\Omega_1 = PA_1 x, \quad \Omega_0 = PA_0 x,$$

where

$$A_1 = \int_0^\infty \frac{d\psi}{(a^2 + \psi)^{\frac{3}{2}} (b^2 + \psi)^{\frac{3}{2}} (c^2 + \psi)^{\frac{3}{2}}},$$

$$A_0 = \int_\lambda^\infty \frac{d\psi}{(a^2 + \psi)^{\frac{3}{2}} (b^2 + \psi)^{\frac{3}{2}} (c^2 + \psi)^{\frac{3}{2}}},$$

$$P = \frac{(\mu - 1)X}{(\mu - 1)A_1 + 2(abc)^{-1}},$$

and  $\lambda$  is the parameter of the confocal through the point concerned.

6. Show that the velocity of propagation of electromagnetic action is numerically equal to the ratio of the electromagnetic and electrostatic unit of charge.

7. Define the vector potential of a magnetic field. Find an expression for the magnetic field due to a linear circular conductor.

8. Find the quasistationary electric vibration in a circuit containing a resistance, a capacity, and a self-induction.

Calculate the self-induction of a thin wire bent in the form of a circle of radius  $R$ .

9. Work out a theory of the reflecting power of metals from the point of view of the electromagnetic theory. Show that for a metal like copper with conductivity  $\sigma = 5.14 \times 10^{17}$  and for infrared wavelength  $\lambda = 1.2 \times 10^{-5}$ , nearly 98% of the radiation will be reflected.

10. Show how from a consideration of the laws in an electromagnetic field the three kinds of electrical units in use can be logically obtained. Find the dimensions of the following quantities in the three units: magnetic vector, electric resistance, self-induction, and polarisation vector.

## EIGHTH PAPER

## (ELECTRICITY—SECOND PAPER)

Examiners— $\left\{ \begin{array}{l} \text{DR. S. C. KAR, M.A., PH.D.} \\ \text{,, N. R. SEN, D.Sc., PH.D.} \end{array} \right.$

*The questions are of equal value.*

*Answer ANY SIX questions.*

1. Establish the equations of motion of a rigid electron which possesses both translational and rotational motion in an external electromagnetic field. Prove that the work done by the internal electromagnetic forces in an electron is equal and opposite to the work done by the external forces.

2. Deduce by a Lorentz transformation or otherwise the electric field of a uniformly moving electron.

3. Assuming the Lorentz force to be of the form—

$$\mathbf{F} = \mathbf{E} + \frac{1}{c} [\mathbf{V}\mathbf{H}]$$

show that the force exerted on a system of electrons may be regarded as the rate of diminution of a certain quantity distributed over the whole of space.

4. Write a note on the theory of the electromagnetic mass of an electron and show that this conception is consistent with the principles of momentum and energy. Apply this theory to determine the mass of a Lorentz electron.

5. Give on a classical basis the electron theory of the rotation of the plane of polarisation in a magnetic field.

6. Prove, after Lorentz, that an electron inside an isotropic material medium should be acted upon by a force  $\frac{\epsilon+2}{3} eE$ , where  $\epsilon$  is the dielectric constant and  $E$  the vectorial field intensity.

7. Show that the Lorentz transformation is equivalent to an imaginary rotation in space. Hence deduce Einstein's law of addition of velocities and Fresnel's coefficient for a moving medium.

8. Define four velocity and four acceleration. Show that the latter is always perpendicular to the world line.

9. What is the effect of Lorentz transformation on an electromagnetic wave, say, a sine wave? Work out the Doppler effect in frequency and direction of the ray.

10. How would you write down the equations of energy and momentum in a form which is invariant with regard to Lorentz transformation? How is energy transformed from one inertial system into another?

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## PHYSICS

## FIRST PAPER

*The questions are of equal value*

*Not more than THREE questions to be answered from EACH half*

## FIRST HALF

*Examiners—* { PROF. D. M. BOSE, M.A., D.Sc., Ph.D.  
DR. D. N. MALLIK, B.A., Sc.D., F.R.S.E.

1. Deduce an expression for the forced oscillation of a quasielastically bound system with one degree of freedom, subject to a damping force proportional to its velocity. How is the sharpness of tuning of such a system defined? Show how the maximum energy of oscillation depends upon the damping coefficient and on other factors.

Give a physical illustration of such a system.

2. Show how Kepler's laws of planetary motion can be deduced from Newton's law of gravitation. How did Newton prove that the motion of the moon round the earth is due to the latter's gravitational attraction?

3. A rigid body supported at its centre of gravity is acted on by gravitational forces only. Find the integrals of its equations of motion and give a geometrical interpretation of the motion of the rigid body.

4. Write down the equations of motion of an element of volume of an elastic body, and interpret the different terms which appear in them.

Show that in the case of an isotropic body, two types of waves will be propagated through it. Discuss their nature and find their velocities of propagation.

5. A fluid at rest is subject to a conservative system of forces. Show that the surfaces of equal pressure coincide with the surfaces of equal density.

Is this also true in the case of a fluid in motion? Investigate the point.

## SECOND HALF

*Examiners—* { MR. DURGADAS BANERJEE, M.Sc.  
DR. B. B. RAY, D.Sc.

1. Establish from the principle of Virtual work the condition which favours the resting of a drop of liquid on another liquid and illustrate it by a suitable example.

2. Describe the theory and workings of any modern pump used in the laboratory for high vacuum purposes.

3. Describe an experiment by which the Maxwell distribution law has been verified.

4. Write a short note on Brownian movement. Show how you can explain the phenomenon from statistical considerations.

5. Give the theory of the method for determining the viscosity of a liquid involving the use of two Co-axial Cylinders moving with respect to each other.

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## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

Examiners— { MR. SUSILKUMAR ACHARYYA, M.Sc.  
 DR. BROJENDRANATH CHUCKERBUTTY, D.Sc.  
 ,, SNEHAMAY DUTTA, D.Sc.

*Only THREE questions to be attempted*

1. Deduce a relation between the pressure and volume of a perfect gas for adiabatic changes.

Hence deduce the rate of fall of temperature with height in an atmosphere assumed to be dry and in convective equilibrium.

2. Describe briefly how the specific heat of gases at low temperatures has been measured.

Explain why the specific heat of hydrogen at low temperatures tends to the value  $3/2 RT$ .

3. What is the Phase Rule? Deduce it from thermo-dynamic considerations and give suitable illustrations.

4. Give a proof of Planck's Radiation formula and indicate its relation to earlier formulæ for black-body radiation.

How has the Planck formula been tested experimentally?

5. Deduce the Saha ionisation formula and indicate some of its applications.

## SECOND HALF

Examiners— { MR. JOGESCHANDRA MUKHERJEE, M.A.  
 ,, DWIJENDRAKUMAR MAJUMDAR, M.A.

*Only THREE questions are to be attempted*

1. Derive from the principle of collinear correspondence the relation connecting the focal planes and the object and image planes in a co-axial optical system and hence find out expressions for the various magnifications.

2. Trace the development of the modern photographic objectives, discussing the merits and demerits of each class.

3. The refractive index of light as directly determined in the case of a dispersive medium does not tally with that determined from a ratio of the velocities. How will you explain the discrepancy?

4. Enunciate Babinet's principle. Hence deduce the nature of the diffraction due to several equal, small, and irregularly placed circular apertures.

5. Describe any form of interference spectroscopy, mentioning its advantages over other forms of spectroscopes.

## THIRD PAPER

Examiners— { Mr. P. C. MAHALANOBIS, M.A.  
 „ SUSILKUMAR ACHARYYA, M.Sc.  
 Dr. BROJENDRANATH CHUCKERBUTTY, D.Sc.

*The questions are of equal value*

*Answer ANY SIX questions*

1. Discuss the molecular theory of specific inductive capacity, and deduce a relation between this property and the number of molecules in the medium per unit of volume.
2. Find an expression for the mechanical force acting on a magnetisable body placed in a non-uniform magnetic field.  
What experimental application has the formula found?
3. A condenser is charged and after a certain interval is discharged through a ballistic galvanometer. Explain how from the observations the conductivity of the dielectric may be determined.
4. Discuss the theory of Grassot fluxmeter, and explain how the instrument may be used for the measurement of field strengths in various cases: (a) strong fields, (b) weak fields, (c) uniform fields, and (d) non-uniform fields.
5. Deduce an expression for the effective resistance of a conductor carrying an alternating current of high frequency.
6. Investigate the flow of energy in an electromagnetic field.
7. Find an expression for the radiation field due to a Hertzian oscillator.
8. Deduce the form of the wave-surface in a biaxial crystal.
9. Describe how the propagation of electromagnetic waves on wires may be experimentally studied.  
Indicate some applications of the arrangement described by you.

## FOURTH PAPER

*Answer ANY THREE questions from EACH half*

*The questions are of equal value*

## FIRST HALF

Examiners— { Mr. CHARUCHANDRA BHATTACHARYYA, M.A.  
 „ K. S. KRISHNAN, M.Sc.

1. Describe Aston's mass-spectrograph and show how an accurate determination of atomic masses can be made with the instrument. How are the results of such a determination significant?
2. Give a theory of the Compton effect. How have the consequences of the theory been verified by experiment?
9. Describe, in detail, some method of measuring accurately the range in air of  $\alpha$ -particles emitted by a radio-active substance. Do you know of any relation between this quantity and the rate of decay of the substance?



4. Give a description of the cloud-chamber apparatus of C. T. R. Wilson and discuss critically the part played by the apparatus in the development of modern physics.

5. 'The resultant positive charge on the nucleus of an atom, measured in "electronic" units, is exactly equal to its atomic number.' Give an account of the experiment by which the statement has been verified.

## SECOND HALF

### (ELECTRON THEORY)

Examiners— { SIR C. V. RAMAN, KT., M.A., D.Sc., PH.D.,  
F.R.S., N.L.  
DR. MEGHNATH SAHA, D.Sc., F.R.S.

1. Deduce the equation of thermionic emission

$$i \text{ (saturation current per unit surface)} = AT^2 e^{-b/T}$$

Discuss how it has been shown that the value of  $A$  may be deduced from certain universal constants.

2. Deduce the De Broglie expression  $\lambda = h/mV$  for the length of the waves associated with an electron moving with a velocity  $V$ .

Explain how this has been tested experimentally.

3. Sketch the theory of diamagnetism.

4. Give an account of the Bohr-Sommerfeld theory of the hydrogen spectrum.

5. Find an expression for the refractive index of a gas as a function of the frequency of the incident light.

## FIFTH PAPER

### (GROUP A)

#### X-RAYS AND CRYSTAL STRUCTURE

Examiners— { DR. B. B. RAY, D.Sc.  
,, S. R. KHASTGIR.

*The questions are of equal value*

*Answer ANY SIX questions. Question 8 counts as two questions*

1. Give J. J. Thomson's theory of X-ray scattering and derive an expression for the energy of X-rays scattered by light elements. How far does the classical theory accord with experimental results?

2. State the various methods available for the measurement of the wavelength of hard X-rays and  $\gamma$ -rays. Describe the photoelectric method for such measurement in full detail.

3. Describe the general characters of the continuous X-ray spectrum and explain how the Planck constant can be evaluated from a study of it. What relation does the total energy of the general radiation bear to the voltage applied to the X-ray tube?

4. Describe the experimental methods employed by Siegbahn for the precision measurement of wavelengths on the X-ray spectrometer.

5. Explain the methods used for measuring the refractive index of X-rays and indicate the significance of such measurements in relation to dispersion theory.

6. Explain how the crystal structure of  $\text{ZnS}$  has been completely determined.

7. What are the primary and secondary absorption edges in X-rays? Write a note on the dependence of these edges on chemical composition in various compounds.

8. Write an essay on:—

'The structure of atoms as revealed by the study of their X-ray emission spectra.'

### (GROUP B)

#### SPECTROSCOPY

Examiners—{ DR. SNEHAMAY DATTA, D.Sc.  
PROF. P. N. GHOSH, M.A., PH.D., SC.D.  
F.INST. P.

*The questions are of equal value*

*Only FIVE questions are to be attempted*

1. What led Bohr to introduce the motion of the nucleus in deducing his theory of the spectrum of ionised Helium? Deduce the theory and explain how it enables us to find an accurate value of  $e/m$ .

2. What is a 'spectral term' as applied to an atom.

Discuss the significance of the different quantum numbers involved in it.

Calculate the spectral terms of a normal Mg-atom.

3. What do you mean by Paschen-Back Effect and Lande's splitting factor? Discuss their significance.

4. What results have been obtained from a study of the absorption spectrum of potassium vapour? How does it differ from the emission spectrum of potassium?

Discuss the importance of such absorption experiments in relation to atomic structure.

5. Describe any modern experimental method by which the energy of line excitation has been correlated to that of electronic impact. Discuss the importance of these experiments in spectroscopy.

6. Describe any type of mounting a concave grating and discuss the theory underlying it.

7. Write short notes on the following:—

(a) Band origin.

(b) Band sequence.

(c) The irregular doublet law.

(d) Effective quantum number.

8. Write a short essay on the Isotope effect in Optical Spectra.

### (GROUP C)

#### ELECTRICAL OSCILLATIONS AND WIRELESS

Examiners—{ PROF. S. K. MITRA, D.Sc.  
MR. C. AUSTIN.

*The questions are of equal value*

*Only SIX questions are to be attempted*

1. (a) Discuss the voltage and current distribution in a single wire antenna with reference to the effects of—

(i) loading coil,

(ii) shortening condenser.

(b) An aerial is to be erected in open country suspended from two steel masts. Equal radiation in all directions is required. Draw a sketch showing the form of aerial to be used. Give the reasons for the form shown.

2. Deduce briefly Maxwell's Field Equations. Hence prove that in free space electromagnetic disturbance is propagated with the velocity of light.

3. Prove that at a small distance from the transmitting antenna the field consists of two parts, a radiation field and an induction field. Hence show that the electric field strength  $E$  (volts per cm.) at a distance large compared with the wave-length is given by  $\frac{377h.I.}{\lambda D}$  where  $h$ , is the

effective antenna height in cms.,  $I$ , the effective aerial current in amperes,  $\lambda$ , the wavelength in cms., and  $D$  the distance from the antenna in cms. (The surface of the earth is assumed to be a perfectly conducting plane.)

4. (a) Discuss the relative advantages of a vertical and a frame aerial for the purpose of reception.

(b) Discuss the effect of frequency on the dissipation of energy in a transmitting antenna system (the system being taken to include masts, transmitter, buildings, and any natural features such as grass, trees, water, etc., in the close vicinity).

5. What is meant by the mutual conductance and the amplification factor of a valve? Deduce an expression for the latter in terms of the shape, size, and relative positions of the grid, filament, and plate.

6. Deduce the conditions for the maintenance of electrical oscillations in a circuit with the help of the triode valve.

Draw a vector diagram showing the phase relations between the oscillatory voltages and currents set up in the various branches of the circuit.

7. Describe three methods of ensuring constancy of wavelength in use on modern transmitters, comparing their advantages and disadvantages.

Discuss the effect on frequency of a valve transmitter where a master oscillator valve controls the frequency and no precautions are taken against temperature changes.

8. What is meant by 'percentage of modulation' in radio-telephony? Describe an experimental method of determining the same practically or describe a method of determining the frequency response of a telephony (or broadcast) transmitter. Over what range should the response be level to ensure good reproduction?

9. Develop the theme of the propagation of electromagnetic waves round the surface of the earth postulating the existence of an ionised upper atmosphere.

Describe some experimental method of estimating the height of the lower limit of the ionised atmosphere.

### (GROUP 'D')

### RELATIVITY

Examiners— { Mr. P. C. MAHALANOBIS, M.A.  
,, SATYENDRANATH BOSE, M.Sc.

N.B.—Attempt ANY FIVE questions. The essay will count as two questions; all other questions carry equal marks

1. Discuss the principle of conservation of mass and energy in the special relativity theory. What application of the principle has been recently made in the discussion of the disintegration of atoms?

2. Write a note on the various optical phenomena observed when the source and the observer are moving with constant relative velocity.

3. The Michelson-Morley experiment to detect the motion of the earth relative to the ether gave a negative result. But Michelson successfully developed an interference method of detecting the daily rotation of earth round its axis. Discuss these two results from the standpoint of relativity theory.

4. Give a careful statement of Einstein's Law of Gravitation and discuss its relation with the Newtonian Theory of Gravitation. Deduce any result which will distinguish between the two theories, and indicate how far actual observations are in agreement with the predicted results.

5. Rewrite in tensor form Maxwell's equations of the electromagnetic field, and calculate the contribution of the electromagnetic field to the material energy tensor.

6. Calculate the gravitational effect of a charged singularity.

7. Explain the notion of parallel displacement. Show that the vanishing of the Riemann-Christoffel tensor is the necessary and sufficient condition that the continuum is homaloidal.

8. Write an essay on *one* of the following subjects :—

(a) Recent attempts at developing a Unitary Field Theory of Electricity and Gravitation.

(b) The size of the universe.

(c) Relation of the Relativity Theory and the Quantum Theory.

## APPLIED PHYSICS

### FIRST PAPER

*The questions are of equal value*

### FIRST HALF

Examiners— { MR. S. K. ACHARYYA, M.Sc.  
                  { „ P. C. MAHANTY, M.Sc.

*ANY THREE questions will carry full marks*

1. State the fundamental law of the electrostatic field, and show that if the total charge of every conductor in the field is given, there is only one way in which these charges can distribute themselves so as to be in equilibrium.

2. Write a short note on 'Electrical Inversion.'

Discuss clearly a suitable example to illustrate the principle of its application.

3. A cable contains a core of copper wire of cross-section 2 sq. mm. It is insulated by a layer of caoutchouc (relative dielectric constant 3) 5 mm. thick and enclosed in an outer covering of lead. What is its capacity per kilometer?

Explain clearly how the insulation resistance of a cable is measured in the laboratory.

4. Describe the construction of the Burrows Permeameter.

How would you determine the B-H curve with the help of this instrument?

5. What is Lumen?

Give the constructional details of a Lummer-Brodhum photometer and discuss its use.

## SECOND HALF

Examiners— { Mr. K. P. CHOKSEY, A.M.I.E.  
 ,, P. C. MAHANTI, M.Sc.

*Only THREE questions are to be attempted*

1. Find an expression for the E.M.F. generated in the case of a D.C. Generator.

A conductor 12 in. long on the periphery of an armature of diameter 18 in. rotates at 1,000 R.P.M. If the field strength under the poles is 6,000 lines per sq. cm., find the e.m.f. induced in the conductor.

2. What is meant by armature reaction in a direct current machine?

Describe a few methods adopted for preventing armature reaction from causing bad commutation under varying load, stating their relative advantages.

How are the eddy-current, hysteresis, and friction losses of a D.C. machine separated experimentally?

3. Plot the speed characteristic against load current of the following types of motors, explaining the suitability of each for its special work :—

- (a) Shunt.
- (b) Series.
- (c) Cumulative Compound.
- (d) Differential Compound.

A 20 H.P. direct current shunt motor has a full load efficiency of 88 per cent. when supplied with power at 200 volts, its armature resistance being 0.06 ohm and shunt resistance 80 ohms. Find approximately, indicating the assumptions made, the percentage change in speed from no load to full load.

4. What is reactance voltage?

Calculate the reactance voltage at full load of an armature having the following constants :—

Diameter of commutator	...	...	0.45 meters.
Speed	...	...	600 R.P.M.
Number of commutator segments	...	...	357
Length of arc of brush contact	...	...	0.65 cms.
Mean length of one turn	...	...	152 cms.
Effective length of core	...	...	14.8 cms.
Turns per commutator segment	...	...	1
Full load current	...	...	60 amps.
Number of armature circuits	...	...	2

5. Work out the efficiency of a booster over a simple motor generator when power is required at a voltage higher than the supply potential difference.

Why is a negative booster used in traction work? Explain briefly its action.

What arrangements are commonly employed to obtain uniform conditions in a three-wire generator with static balancer?

## SECOND PAPER

*The questions are of equal value*

*Only THREE questions are to be attempted from EACH half*

## FIRST HALF

Examiners— $\left\{ \begin{array}{l} \text{MR. J. N. MUKHERJEE.} \\ \text{PROF. P. N. GHOSH, M.A., PH.D., SC.D.,} \\ \text{F.INST. P.} \end{array} \right.$

1. A current of 50 frequency, containing first, third, and fifth harmonics of crest value 100, 15, 12 amperes respectively, is sent through an ammeter and an inductive coil of negligibly small losses. A voltmeter connected to the terminals shows 75 volts. What will be the current indicated on the ammeter, and what is the exact value of the inductance of the coil in henries?

2. One branch of a parallel circuit contains an inductive coil of resistance  $R_1$  ohms and of inductance  $L_1$  henries. The other branch consists of another inductive coil of resistance  $R_2$  ohms and inductance  $L_2$  henries, in series with which (i.e., the second coil) is connected a condenser of adjustable capacitance ( $C$ ) and an adjustable non-inductive resistance ( $R$ ).

Determine the values of capacitance ( $C$ ) and resistance ( $R$ ) which will give equal currents in the two branches with a phase difference of  $90^\circ$ , with respect to each other, assuming that the parallel circuit is connected to a source of sinusoidal E.M.F. of constant amplitude and frequency.

Determine the values of  $C$  and  $R$  when

$$\begin{aligned} L_1 &= L_2 = 0.2 \text{ henry,} \\ R_1 &= R_2 = 10 \text{ ohms,} \\ \omega &= 2\pi f = 314. \end{aligned}$$

3. (a) Discuss the effects of low power factor in an electrical supply system on the—

(i) size and performance of Alternators, Transformers, and Prime Movers;

(ii) losses on transmission lines;

(iii) voltage regulation of the whole electrical system.

(b) A consumer takes 150 amps. from a 400 volt 50 cycle single-phase supply with a lagging power factor 0.7. Calculate the capacity of the condenser required to increase the power factor to unity, and find the new value of the current in the mains.

If the condenser for the purpose cost Re. 1 per microfarad and energy  $1\frac{1}{2}$  annas per unit, find how long it will be before the condenser will have saved its cost if the resistance of the mains is 0.05 ohms.

4. Explain fully how a synchronous motor can be utilised to improve the power factor of a circuit in which the load is mainly inductive.

If the load on a 500 volt system consists of a synchronous motor taking 50 kw. at unity power factor and induction motors taking a total of 150 kw. at an average power factor 0.6, find the power factor of the whole load and the value to which this rises when the synchronous motor is made to take leading currents with power factors (a) 0.8, (b) 0.5.

If the armature resistance of the synchronous motor is 0.15 ohm and the resistance of the transmission mains, etc., is 0.07 ohm, find the changes in the losses in the above two cases.

5. Establish an expression for the effective E.M.F. developed by a single-phase alternator and show that this depends on the wave shape of the flux and spread of the coils. Deduce the value of the form factor when the flux distribution is sinusoidal.

### SECOND HALF

Examiners— { PROF. P. N. GHOSH, M.A., PH.D., SC.D.,  
F.INST. P.  
{ MR. K. P. CHAKSEY, A.M.I.E.

1. (a) A 500 K.V.A. 16 pole 3 phase Alternator runs at 375 R.P.M. and has a flux of 6 megolines. The winding is uniformly distributed and consists of 3 conductors per phase per pole.

Calculate the line voltage and the line current when the alternator

(a) star connected, (b) mesh connected [the breadth factor coeff. being

$$\frac{2n'}{n\pi} \cdot \sin \frac{n\pi}{2n'} \Big].$$

(b) Explain briefly the principle of any automatic type of regulator for keeping the voltage of an alternator constant under varying loads.

2. (a) Give a short description of the different methods adopted for the starting of three-phase induction motors, pointing out the suitability of each method.

(b) When is a synchronous induction motor to be preferred to that of an ordinary induction type?

3. (a) Derive the expressions for the voltage and current ratios of a six-phase rotary converter.

(b) Discuss a few common methods of starting converters from the alternating current side.

4. In a 50 K.V.A. 2,200/220 volt Transformer the full load equivalent reactance drop is 3.1 per cent. and the resistance drop is 1.1 per cent. of the rated terminal voltage on the low tension side. Find the percentage regulation for 0.85 power factor.

5. On test, a 500 volt 3 phase 50 cycle induction motor gives the following data :—

At No load—

Input—5.35 kw.

Current—146 amps.

Blocked rotor—

Input—56.1 kw.

Current—802 amps.

Impressed volt—250.

Both rotor and stators are star connected and the resistance between the mains is 0.03. ohms.

Draw the circle diagram.

## THIRD PAPER

*The questions are of equal value*

## FIRST HALF

*Examiners*—{ MR. S. K. ACHARYYA, M.Sc.  
DR. B. N. CHUCKERBUTTY, D.Sc.

*ANY THREE questions will carry full marks*

1. What do you understand by the Mechanical Equivalent of Heat? Describe the method of determining it which you consider the best. Give full reasons for your answer.

If the kinetic energy contained in a ball of iron, having fallen from rest through 21 metres, is sufficient to raise its temperature through  $0.5^{\circ}\text{C}.$ , calculate the value for the mechanical equivalent of heat.

( $g=980 \text{ cm / sec}^2$ . Sp. heat of iron  $=0.1$  )

2. Describe Forbes' method of measuring the thermal conductivity of a bar in absolute measure and give the theory underlying it.

3. Summarise various methods of measuring high temperatures and discuss their relative merits. Describe completely one of the recent methods of measuring low temperature.

4. What is meant by 'Phase,' 'Components,' and 'Degrees of freedom' of a thermodynamic system? Deduce the equation of the 'Phase Rule' from thermodynamic considerations and illustrate the law by a suitable example.

5. State Planck's Law of distribution of energy in the emission of the spectrum of a black body, and show that both Wien's Law and Rayleigh-Jeans' Law are particular cases of it.

In the emission of spectrum of a black body at a temperature of  $1727^{\circ}\text{C}.$ , the maximum emission takes place at the wave  $\lambda=1.46\mu$ . Find the value of Planck's Constant, it being given that

$c$  = velocity of light  $=3 \times 10^{10} \text{ cm. per sec.}$

$N$  = Avogadro number  $=6 \times 10^{23}$ .

## SECOND HALF

*Examiners*—{ MR. J. M. BOSE, M.A., I.Sc.  
PROF. D. M. BOSE, M.A., Ph.D.

*Not more than two questions from either group*

## (GROUP A)

1. Deduce an expression for the mean free path of a system of gas molecules. What properties of a gas depend upon this quantity and how are they interrelated?

2. Write down Maxwell's law of the distribution of velocities in a system of particles at a temperature  $T$ . Give an account of the experimental verifications of this law.

3. Give an account of the different apparatus which can be used to measure the pressure of rarefied gases.



(GROUP B)

4. A thin cylindrical shell is subjected to internal pressure, calculate the principal stresses at any point.

If the end plates are hemispherical and Poisson's ratio equal to  $\cdot 3$ , prove that the thickness of the plates of the cylindrical and spherical parts should be in the ratio 7:17.

5. A beam rests on supports 8 ft. apart and carries a load of 1 ton uniformly distributed. The beam is rectangular in section 3" deep. How wide should it be in order that the skin stress may not exceed 4 tons per square inch?

6. Establish Euler's formula for the stability of a column under a vertical load.

A straight steel rod of uniform circular section and five feet long is found to deflect one inch under a central load of 20 lbs. when tested as a beam with simply supported ends. Determine the critical load for the same beam when used as a vertical strut with free ends.

FOURTH PAPER

FIRST HALF

Examiners— { PROF. P. N GHOSH, M.A., PH.D., Sc.D.,  
F.INST. P.  
MR. P. GANGULI, B.Sc.

*The questions are of equal value*

*Only THREE questions to be attempted*

*Candidates are allowed to use steam tables,  $T-\phi$  and  $H-\phi$  diagrams.*

1. The law of the expansion curve of a gas engine indicator diagram is found to be  $PV^{1.37} = \text{constant}$ . Assuming  $c_p / c_v = 1.37$ , find the rate of

heat reception  $\frac{dH}{dv}$

If the law of the compression curve is  $PV^{1.25} = \text{constant}$ , what is the rate of heat reception during compression? If the piston sweeps out 600 cubic ft. per minute when the pressure on the expansion curve is 160 lbs. per sq. inch absolute, what is the heat reception at this instant? Prove any formula you use.

2. Sketch a  $T-\phi$  and a Mollier chart for steam. Explain with the help of these diagrams, the difference between an adiabatic expansion and throttling.

Steam at 200 pounds per square inch absolute ( $t=392^\circ\text{F.}$ ) is superheated  $100^\circ\text{F.}$  It is then passed through a reducing valve and has its pressure reduced to 15 pounds per square inch absolute ( $t=218^\circ\text{F.}$ ).

Determine with the help of a Mollier chart the temperature and condition of the steam after wire drawing, and calculate without using steam tables, the change of entropy. Take the average specific heat as 0.5.

3. An engine uses 20 lbs. of dry steam (saturated) per indicated horse power. The boiler pressure is 150lbs. per square inch and the feed temperature is 20°C.

Calculate—

- (i) the thermal efficiency,
- (ii) the Rankine efficiency,
- (iii) the efficiency ratio.

Prove any formula you use.

4. A four-stroke gas engine has the following dimensions :—

Cylinder—12" in diameter.

Piston stroke—18".

In a trial lasting for an hour the total number of revolutions was found to be 9,000 and the total number of explosions 3,600.

The brake wheel is 6 ft. in diameter and was loaded with 200 lbs. The mean effective pressure was 82 lbs. per sq. inch. Calculate the brake horse power, the indicated horse power, and the mechanical efficiency.

5. Explain the terms 'Air standard efficiency,' 'Compression ratio,' 'Indicated thermal efficiency,' and 'Relative efficiency' with reference to a heat engine, and show their relations.

The stroke volume of an engine is 1413.7 cubic inches and the clearance volume is 353 cubic inches, indicated thermal efficiency being 32.5 per cent. Determine the air standard efficiency and the relative efficiency of the engine.

## SECOND HALF

Examiners— { PROF. S. K. MITRA, D.Sc.  
MR. C. AUSTIN.

*The figures in the margin indicate full marks*

*The number of questions attempted should be such that the total marks do not exceed 50*

1. Contrast the relative advantages of the resistance capacity, transformer, and tuned-anode methods of amplification. If a resistance  $R$  is inserted in the plate circuit of a valve, prove that the voltage

magnification  $\mu$  obtainable from the arrangement is  $1 + \frac{\mu_0 R_v}{R}$  where  $\mu_0$  is

the amplification factor of the valve and  $R_v$  its A.C. resistance. Is it possible in practice to make it equal to  $\mu_0$ ?

2. (a) Give the theory of the oscillating arc. State briefly the improvements made by Poulsen to overcome its limitations as a generator of H.F. oscillations. 10

(b) Describe, with neat diagrams, the mode of action of static frequency changers.

3. (a) Discuss the voltage and current distribution in a single wire antenna with reference to the effects of (i) loading coils, (ii) shortening condensers. 10

(b) An aerial is to be erected in open country suspended from two steel masts. Equal radiation in all directions is required. Draw a sketch showing the form of aerial to be used. Give the reasons for the form shown.

4. Draw a circuit diagram for a superheterodyne receiver indicating on it capacity, inductance, and frequency values, assuming the receiver to be used on 1,000 kilo-cycles. Indicate also where screening would be used. 10

5. (a) An air condenser capacity 0.0005 mfd., to withstand 30,000 volts D.C., is to be built, using 10 square metal plates. Calculate the distance between plates and the area of one side of the plate. S.I.C. for air may be taken as unity. Dielectric strength, 30,000 v., breaks down plates at 2 cms. distance in air. Factor of safety, 6. 20

(b) Discuss the losses in a condenser used in a high-frequency circuit with high voltages.

## ORGANIC CHEMISTRY

### GENERAL PAPER

Examiners— { DR. PRAPHULLAKUMAR BOSE, D.Sc.  
 „ MAHENDRANATH GOSWAMI, D.Sc.  
 PROF. P. C. MITTER, M.A., Ph.D.  
 DR. ANUKULCHANDRA SARKAR, M.A., Ph.D.  
 PROF. H. K. SEN, D.Sc.  
 MR. RAJENDRANATH SEN, M.A., M.Sc.  
 DR. R. K. SINGH, M.A., D.Sc.

*Attempt six questions only*

*The questions are of equal value*

1. Explain clearly the meaning of the term Dynamic Isomerism. What different methods are available for determining the structure of dynamic isomers?

2. Give an account of the methods that may be used for converting benzene derivatives into aliphatic compounds and *vice versa*.

3. Starting from uric acid how would you obtain :—

- (a) Adenine.
- (b) Xanthine.
- (c) Caffeine.
- (d) Violuric acid?

4. Establish the constitutional formula for citronellal.

5. Write notes on :—

- (a) Geometrical inversion.
- (b) Michael's reaction.
- (c) Catalytic reduction.

6. How are  $\alpha$ -amino-acids prepared?

Describe the syntheses of (a) ornithine and (b) arginine.

7. How are the following substances prepared?—

(a) Phenylparaconic lactone, (b) resacetophenone, (c) cacodyl oxide, (d) tartrazine, (e) saccharine, (f) metol.

8. Establish the constitutional formula for piperine.

## ORGANIC CHEMISTRY—SPECIAL

## FIRST PAPER

*Attempt FIVE questions only**The questions are of equal value*

1. Give a short account of the aliphatic 'dialzo' compounds.
2. Give a review of the work which has been done to effect asymmetric synthesis. How do you explain the presence of optically active compounds in nature?
3. Describe the synthesis of curcumin and isocurcumin. How is the isomerism explained?
4. How would you proceed to determine the constitution of a disaccharide?  
Establish the constitution of melibiose.
5. Indicate the various stages by which trimethyl succinic acid is obtained from camphor.  
How is camphoronic acid synthesised?
6. What are the polypeptides? Describe their properties and also their general methods of synthesis.
7. Describe the synthesis of any five of the following :—
  - (a) Cyclopentanone.
  - (b) Orsellinic acid.
  - (c)  $\alpha$ - and  $\beta$ -ionone.
  - (d) Atophan.
  - (e) Chrysin.
  - (f) Phenyl mercuric chloride.

## SECOND PAPER

*Attempt FIVE questions only**The questions are of equal value*

1. Illustrate, with typical examples, the use of the following substances in the synthesis of heterocyclic compounds :—
  - (a) Benzamidine.
  - (b) Phenyl hydrazine.
  - (c) O-Amidobenzophenone.
2. Give a short account of the more important vat dyes with special reference to their methods of preparation and constitution.
3. Establish the constitutional formula of Berberine or Harmaline.
4. Give an account of the important synthetic hypnotics. Discuss the relation between their chemical constitution and physico-chemical and physiological properties.
5. Discuss the constitutional formula for catechin.
6. How are the following prepared?—
  - (a) Acetonyl acetone.
  - (b) 1-amino-2-methyl anthraquinone.
  - (c) Acriflavine.
  - (d) Primuline.
  - (e) Phenyl-arsinic acid.
 State their uses.

7. Write short notes on :—

- (1) Wagner-Meerwein transformation.
- (2) Mutarotation.
- (3) Chromo-isomerism.

## INORGANIC CHEMISTRY

### GENERAL PAPER

*Examiners—* { DR. P. NIYOGI, M.A., PH.D.  
MR. PRIYADARANJAN RAY, M.A.  
DR. PULINBIHARI SARKAR, Dr.es.Sc., A.I.C.  
,, RAMESCHANDRA RAY, M.A., D.Sc.

*The questions are of equal value*

*Only six questions are to be attempted*

1. Write an essay on the physical and chemical methods of determining atomic weights of elements, illustrating your answer with examples.
2. Write a short historical account of the discovery of the elements of the Zero group of the Periodic table and discuss their position. How is Helium obtained in a state of purity? What are its uses?
3. Write short notes on any three of the following :—
  - (a) Isotopes and isobars.
  - (b) Isomerism in inorganic compounds.
  - (c) Thermite Process.
  - (d) Radioactive radiations.
4. Write a note on the methods of softening purifying and sterilising water for domestic and industrial purposes.
5. How are the following substances prepared and what are their uses?—
  - (a) Aluminium nitride.
  - (b) Potassium persulphate.
  - (c) Titanium Trichloride.
  - (d) Hydroxylamine hydrochloride.
  - (e) Hypophosphorus acid.
6. Describe fully the Bismuthate-, persulphate-, and Volhard's methods of determining manganese, giving reasons for your preference for any of these.
7. Describe briefly the method employed for the synthesis of ammonia from its constituents, explaining clearly the principles underlying the process.
8. Name the important ores of Nickel. How is the metal obtained from them in a state of purity? State the uses of the metal and its alloys.

## INORGANIC CHEMISTRY—SPECIAL

## FIRST PAPER

*The questions are of equal value*

*Only FIVE questions are to be attempted*

1. Write an essay on chemical elements and atoms, noting specially the modern views regarding them.

2. How would you determine the composition of unstable complexes that are formed in solution only and cannot be obtained in the solid state, and which are in mobile equilibrium with its constituents? How can you predict their proportion at any temperature when known concentrations of the two constituents are mixed?

Illustrate your answers with specific examples.

3. Describe the types of isomerism of co-ordination compounds and discuss the occurrence of these with special reference to the methods whereby the isomerism has been demonstrated.

4. What are thionic acids? How are they obtained? Discuss their constitution. How would you detect the presence of thiosulphate, sulphite, sulphate, and dithionates in a mixture and separate them from each other?

5. Give a short account of the hydrides and halides of silicon and boron, and compare their physical and chemical properties.

6. Discuss the chemical and physical properties of the elements of the sixth group of the periodic table. How would you account for the division of the group into two sub-groups and how is it justified by the chemical properties of their members?

7. Name the sources from which the metal gold is obtained. Describe fully the methods employed for the extraction and purification of the metal, explaining clearly the chemical changes involved.

## SECOND PAPER

*The questions are of equal value*

*Only FIVE questions are to be attempted*

1. Write a short essay on modern developments of methods in analytical chemistry.

2. Discuss the position of the rare earth elements in the periodic table. How is this explained in modern views of the structure of the elements? Describe fully two methods which are used in the separation of rare earths from each other.

3. Write short notes on any three of the following :—

- (a) Electro-valency and co-valency.
- (b) Radioactive indicators.
- (c) Discovery of Hafnium.
- (d) Active nitrogen.

4. One violet and one green isomeric chromic chloride hydrate were discovered by Recoura. How did Werner explain their constitution? How was the third green isomeric chloride predicted from physico-chemical experiments by Bjerrum and later on isolated by him? What do you know regarding the mechanism of hydrolysis of these chlorides?

5. How do Niobium and Tantalum occur in nature? What do you know of their chemistry?

How are they separated from one another?

6. Two classes of tungstates are known. Give a description of their preparation and chemical behaviour and of the acids derived from them.

7. Discuss the equilibrium diagram of the iron-carbon alloys giving a neat sketch of the same. Give an account of the different methods by which the diagram is constructed.

## PHYSICAL CHEMISTRY

### GENERAL PAPER

Examiners—{ Mr. NANIGOPAL CHAKRABARTI, M.Sc.  
 { „ KALIKUMAR KUMAR, I.I.Sc.  
 { „ ASUTOSH MAITRA, M.A.  
 { PROF. J. N. MUKHERJEE, D.Sc.  
 { DR. JNANENDRACHANDRA GHOSH, D.Sc.

*The questions are of equal value*

*Not more than six questions are to be attempted*

*Logarithmic tables will be supplied*

1. (a) Describe, in detail, how you would prepare a standard cadmium cell.

(b) Describe the reactions that take place during the process of charging and discharging a lead accumulator. How does its E.M.F. depend on the concentration of sulphuric acid?

2. (a) By what methods has the ionisation constant of water been determined?

Describe one method in detail.

(b) Given the specific conductance of water at 18° is  $0.038 \times 10^{-6}$  mhos and that the ionic conductivities, at infinite dilution of hydrion and hydroxidion are 318 and 174 respectively, calculate the degree of ionisation of water.

3. Write an essay on the theory of indicators.

4. Deduce from thermodynamical considerations Kirchoff's equation of isothermal distillation :

$$\frac{\partial Q(x)}{\partial x} = -RT^2 \frac{\partial}{\partial T} \left( \frac{P_0}{P} \right)$$

and show how you can obtain the Duhem and Margule's equation therefrom.

5. Discuss the question of the exact determination of atomic weights by physical methods alone.

Or,

What is meant by an 'equation of state'? Discuss the merits of Dieterici's equation of state. Show how to calculate the critical constants from Dieterici's equation, and discuss how the value of  $\frac{RT_c}{p_c v_c}$

compares with experimental values.

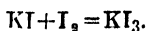
6. Write short notes on any three of the following :—

- (a) Solid solutions.
- (b) Liquid crystals.
- (c) Iso-electric point.
- (d) Buffer solution.
- (e) Photo-chemical induction.

7. State the laws of photo-chemistry. Give some typical examples of photo-chemical actions and discuss on what basis photo-chemical reactions have been classified.

8. Deduce from thermodynamical considerations the Partition Law.

At 14° the distribution coefficient of iodine between carbon tetrachloride and water is 79. A solution of iodine in tenth-normal potassium iodide was shaken up with carbon tetrachloride. After equilibrium had been attained 1 litre of the carbon tetrachloride phase contained 0.02022 gram-molecule of iodine, whereas the same volume of the aqueous phase contained 0.02118 gram-molecule of iodine. Calculate the equilibrium constant of the reaction



9. How do you prepare the following in the colloidal state : gelatine, silicic acid, arsenious sulphide, and ferric hydroxide? Which of these would you class as lyophobic and which as lyophilic colloids? State the properties of the colloidal systems on which you base your classification.

Or,

What are the various theories that have been proposed from time to time to explain the origin of the electrical charge on the colloid particle? Which of these theories is, in your opinion, most suitable, and why?

10. Give an historical account of the discovery of Radium. Distinguish between  $\alpha$ ,  $\beta$  and  $\gamma$  radiations. What is the experimental evidence for identifying the  $\alpha$ -ray with helium nuclei?

## FIRST PAPER

*Not more than FIVE questions are to be attempted*

*The questions are of equal value*

*Logarithmic tables will be supplied*

1. (a) Assuming Maxwell's law of distribution of velocities in an assemblage of gas molecules, deduce expressions for (i) the most probable velocity  $C_w$ , (ii) the mean velocity  $\bar{c}$ , and (iii) the mean of the squares of the velocities  $\bar{c}^2$  of the molecules when they are at a temperature  $T$ .

(b) Calculate the values of  $C_w$ ,  $\bar{c}$ , and  $\sqrt{\bar{c}^2}$  for  $H_2$  and  $O_2$  at 0°C. given the following data :—

Molecular weight of Hydrogen	...	...	2
Molecular weight of Oxygen	...	...	16
Gas constant $R$	...	$8.31 \times 10^7$	ergs/degree.

(c) Obtain an expression for the mean free path of a molecule.

2. Explain carefully the considerations which led Planck to formulate the Quantum Theory, and give a concise account of the use Bohr made of this theory in explaining the hydrogen spectra.

3. Deduce an exact equation relating the osmotic pressure of concentrated solutions with the lowering of vapour pressure. How far does the theoretical equation agree with experimental observations?



4. How would you distinguish between a homogeneous and a heterogeneous reaction in a system containing gaseous reactants? Discuss the decomposition of gaseous nitrogen pentoxide and hydrogen iodide in detail.

5. Explain, with illustrations, how the Nernst Heat Theorem can be applied for calculating the affinity of a process from thermal data.

6. Write a note on the work of adhesion between (a) two liquid surfaces, and (b) between a solid and a liquid surface.

7. Give an account of Donnan's theory of membrane equilibrium and experimental attempts to verify this theory.

8. Write an essay on Photosensitized Chemical Reactions.

Or,

At 0°C it was found that  $\text{CO}_2$  is taken up by charcoal as follows,  $p$  being the pressure of gas when equilibrium is established and  $c$  being the amount of the gas in the solid :—

$c$	...	0.77	1.45	2.02	2.48
$p$	...	25.1	137.4	416.4	858.6

What conclusions might be drawn from these results? Discuss the nature of such processes.

## SECOND PAPER

*Not more than FIVE questions are to be attempted*

*The questions are of equal value*

*Logarithmic tables will be supplied*

1. The specific conductivity of pure water is  $0.0384 \times 10^{-6}$  reciprocal ohms at 18°. The velocity of  $\text{H}^+$  and  $\text{OH}^-$  per volt per cm. is  $300 \times 10^{-5}$ , and  $170 \times 10^{-5}$  cm., respectively. Find out the dissociation constant of water; explain the various steps in your process of calculation.

Describe any method for determining the concentration  $\text{H}^+$ -ions.

2. Describe the electro-chemical properties of three typical Oxidation-Reduction Indicators.

Or,

Give an account of the electro-chemistry of non-aqueous solutions with special reference to the work of Walden, Kraus, and Bray.

3. What is the Schulze-Hardy-Linder-Picton rule of valency? What is the present position of this law in connection with the electrolytic coagulation of colloids?

4. Give an account of the theory of the velocity of ionic reactions with special reference to the work of Brønsted and Soper.

5. Discuss Nernst's theory of diffusion in electrolytic solutions and deduce the expression

$$D = \frac{2UV}{U + V} RT$$

Deduce an expression for the diffusion potential.

6. Write an essay on Langmuir, Harkins, and Adams' work on 'surface orientation.'

7. Write full explanatory notes on :--

- (i) Radioactive equilibrium.
- (ii) The Displacement Laws of Fajans and Soddy.
- (iii) The Geiger-Nuttall Relation.

Or,

Describe Millikan's 'oil-drop' method of determining the charge on an electron giving full experimental details. How has the Avogadro Constant  $N$  been determined by Millikan?

8. Explain fully, with illustrations, the following :--

- (1) Consecutive reactions;
- (2) Opposing reactions; and
- (3) Side reactions.

Discuss Wegscheider's Test for side reactions fully and point out its limitations.

A gas under certain conditions is found to polymerize, so that 1 vol. of the original gas yields half that volume of the polymer. In an experiment which was carried out at constant temperature and volume the pressure of the gas fell in 1 hr. to 0.8600 and in 8 hrs. to 0.5359 of its original value. What is the order of the reaction and what deductions can you draw with respect to the mechanism of the polymerization?

## APPLIED CHEMISTRY

### FIRST PAPER

*The questions are of equal value*

*Only THREE questions should be attempted from EACH half*

### FIRST HALF

Examiners—

{	MR. PRIYADARANJAN RAY, M.A.
	SIR P. C. RAY, Kt., C.I.E., D.Sc., Ph.D.,
	F.C.S.
	DR. H. K. SEN, M.A., D.Sc., D.I.C.
	DR. PANCHANAN NIYOGI, M.A., Ph.D.
	MR. N. N. SEN, M.Sc.

1. Review all the principal methods for the manufacture of hydrogen gas on a large scale. Describe, in detail, the method you consider suitable for adoption in the suburbs of Calcutta, giving reasons for your choice.

2. What are alloys? Classify the different varieties of binary alloys, and give a short account of the methods employed for the construction of their equilibrium diagrams.

3. How does platinum occur in nature and how would you separate it from the other allied metals in a state of purity? State the chief industrial uses of the metal and its alloys.

4. How are the following substances obtained on a large scale and what are their special properties and uses?—

(i) Stainless steel; (ii) Permutite; (iii) Calcium cyanamide; (iv) Yellow phosphorus; (v) Potassium cyanide.

## THIRD PAPER

(CHEMICAL ENGINEERING)

*The questions are of equal value*

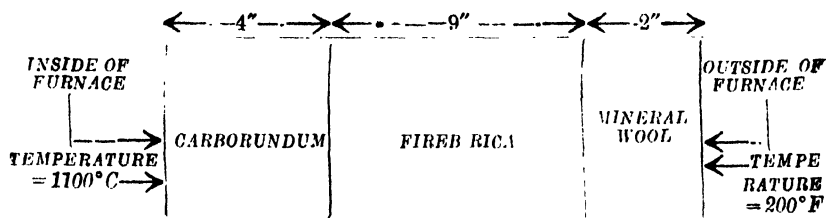
## FIRST HALF

Examiners— { MR. BANKIMCHANDRA RAY, M.Sc.  
 ,, MANINDRAKUMAR SEN, M.Sc.  
 DR. H. K. SEN, M.A., D.Sc., D.I.C.  
 ,, HIRALAL RAY, Dr.Eng. (Charleston).

*Answer any THREE questions*

1. Draw a neat sketch of the Kestner Climbing Film Evaporator and describe, in detail, its method of working, with special reference to its advantages over other types of evaporators.

2. A furnace-wall is constructed with thickness and of materials as shown in the following diagram :



Heat conductivities/sq.ft./hour/foot/°F :—

(a) of Carborundum	... 5.6 B.T.U.
(b) of Fire-brick	... 1.0 "
(c) of Mineral wool	... 0.035 "

Calculate the heat lost by conduction through one sq. ft. of the wall per hour.

Also find out the temperature at the boundary wall of carborundum and fire-brick.

3. Describe, with as much detail as possible, a furnace burning coal on grates, showing the relations between the following :—

- (i) Grate-area.
- (ii) Amount of coal burnt per hour.
- (iii) Amount of air to be introduced per hour.
- (iv) Volume of the gas combustion chamber.
- (v) Chimney dimensions.

4. Write a full account of your visit to any one of the following factories :—

- (i) Cement Factory at Banmor;
- (ii) Paper Mills at Titagurh.

5. Describe, with a neat sketch, the working of a plant for the complete separation of Naphtha to Benzene, Toluene, etc.

## SECOND HALF

*Answer any THREE questions*

1. Discuss the merits of  $\text{NH}_3$ ,  $\text{CO}_2$ , and  $\text{SO}_2$  as working medium in a refrigerating machine.

2. A condensing engine with back-pressure 3 lbs./sq. in. works with steam at 45 lbs. by gauge and cut-off at half-stroke. It is proposed to increase the pressure of steam to 75 lbs. by gauge and cut-off at one-fourth stroke. Compare the relative work done and weight of steam consumed in the two cases

$$[\log e^2 = 0.693$$

$$\log e^4 = 1.386].$$

3. Describe, with details, the construction and working of a Diesel engine, indicating specially its distinction from an Otto-cycle engine.

4. Find an expression for the thermal efficiency of an engine which is receiving heat at constant volume and rejecting heat also at constant volume.

Compare the relative merits of a petrol engine and an alcohol engine.

5. Describe, with the help of a neat pencil sketch, the manufacture of finished sized paper from wood.

## FOURTH PAPER

## (OIL TECHNOLOGY)

Examiners— ( DR. MAHENDRANATH GOSWAMI, M.A.  
 „ R. L. DATTA, D.Sc.  
 ( „ N. N. GODBOLE, M.A., B.Sc., Ph.D.

N.B.—Try any FIVE of the following

1. Write a short essay on our knowledge regarding the characterisation and separation of common fatty acids in non-drying vegetable oils.

2. What are sulphonated oils? How are they manufactured? State fully their industrial uses.

3. Describe the manufacture of fatty acids for use in the candle industry, especially with reference to the application of more unsaturated stocks.

4. What attempts have been made to elucidate the chemical nature of natural glycerides?

5. Describe the principal methods of the preparation of natural essential oils with typical plants which are commonly used.

6. Describe the general methods available for bleaching and deodorising of fatty oils.

7. Write notes on any two of the following:—

(1) Utilisation of the natural gas of petroleum well.

(2) Preparation of boiled oil and its application.

(3) Preparation of artificial musk.

## FOURTH PAPER

## (FERMENTATION)

Examiners— { DR. GILBERT J. FOWLER.  
 „ S. R. DASGUPTA, Dr.Eng. (Darmsted).  
 „ H. K. SEN, M.A., D.Sc., D.I.C.

*The questions are of equal value*

## FIRST HALF

*Answer only THREE questions*

1. State what you know about the following substances :—  
 (a) Dextrin; (b) Lignin; (c) Pectin; (d) Hippuric acid; (e) Urea;  
 (f) Furfural.
2. Write an essay on the world's sources of supply of cane-sugar.
3. Give an account of the distinctive characteristics of *bacteria*, *yeasts*, and *moulds*.
4. Describe shortly the production by fermentation processes of the following substances :—  
 Acetone, methane, ethylalcohol, lactic acid.
5. Give some account of the occurrence and properties of the following enzymes :—  
*Maltase, Oxidase, Zymase, Papain, Trypsin, Invertase.*  
 Describe carefully the separation and detection of any two of them.
6. Make careful sketches of *two* of the following :—  
 (a) A centrifuge (either for works or laboratory).  
 (b) A filter press.  
 (c) A vacuum pan.  
 (d) A drying oven.

## SECOND HALF

*Answer THREE questions only*

1. What do you know about the influence of phosphates on alcoholic fermentation of sugar?
  2. Describe, with details, the manufacture of glycerine from starch, indicating at the same time the reactions involved.
  3. Write notes on :—  
 (i) Hansen's culture apparatus.  
 (ii) Aerobic and anaerobic fermentation.  
 (iii) Bacterium *Aceto-ethylicum*.  
 (iv) Koch's pure culture method.
  4. Write an essay on the biochemical degradation of cellulose. and indicate its commercial possibilities.
  5. How do you account for the following?—  
 (a) The presence of fusel oil in fermentation spirit.  
 (b) Formation of formic acid in fermentation.  
 (c) Souring of milk.  
 (d) Vinegar from dilute sugar solution on long keeping.
-

## BOTANY

### (NEW COURSE)

### FIRST PAPER

*Answer any THREE questions from EACH half  
Illustrate your answers by suitable sketches wherever necessary*

#### FIRST HALF

*Examiner—MR. KALIPADA BISWAS, M.Sc.*

*The questions are of equal value*

1. Describe the life-history of any one of the members of any two genera of *freshwater Rhodophyceæ* commonly found in this country.
2. What do you know about the morphology and the life-history of *aërophilous Green-algæ* commonly found in and about Calcutta? Write short notes on their occurrence and distribution.
3. Classify representative members of *Blue-green algæ* which are characterised by *true and pseudo-branching*. Give a short account of their sub-aerial habit.
4. Trace the origin of *sporophyte* in *Chlorophyceæ*. What do you consider the link between *Green-algæ* and *Mosses*? Discuss the question briefly.
5. Discuss the relationship of the lower and higher forms of *Hepaticæ*. Give a short outline of the evolution of alternation of generation in *Bryophyta*.

#### SECOND HALF

*Examiner—DR. SAHAYRAM BOSE, M.A., PH.D.*

*The figures in the margin indicate full marks*

1. What do you know of Virus-disease in plants? How would you combat the disease? 16
2. What is the Silver-leaf disease? To what is this usually due? What is the primary cause of 'silvering' of leaves in affected plants? 18
3. What is the modern system of classification of Basidiomycetes? What are the chief distinguishing characters of the main subdivisions? What are *Aphylllophorales*? 16
4. Write all you know about the 'Pink-disease' of tropical plants. Where is it usually prevalent? 16
5. Discuss the phylogeny of the Rusts. What have you learnt from Cragie's recent work on Pycniospores? 18

### SECOND PAPER

#### FIRST HALF

*Examiner—MR. GIRIJAPRASANNA MAJUMDAR, M.Sc.*

*The questions are of equal value  
THREE questions are to be attempted*

1. Write a short essay on the past history of Ferns.
2. Discuss the morphological nature of the *rhizophores*.

3. If the Pteridophytes be arranged according to the complexity of the appendages and specially to their spore-producing parts, the Lycopodiales will come first. Justify.

4. If Isoetes be removed from the Lycopodineæ, with what group of vascular cryptogams shall it be associated, and why?

5. The vascular structure of the mature shoot of the Lycopodiales is referable in origin, in almost all cases, to the nonmedullated monostele. Justify.

Or,

Discuss the nature of the stele of Equisetum.

## SECOND HALF

Examiner—DR. B. SAHANI, D.Sc.

*The questions are of equal value*

*Attempt only FIVE questions*

1. Describe briefly those genera of the Bennettitales which are found in India. Give an account of the distribution of the whole group in Time and Space.

2. Discuss briefly the ancestry of the conifers. Name all the genera of conifers found wild in India and say what you know of their occurrence.

3. Describe, in some detail, the life-history of any one member of the Cycadales. Name all the Indian cycads known to you.

4. Give a brief account of the reproductive organs of those genera of the Gnetales which belong to the Indian flora. Describe the occurrence of these genera in India.

5. Write a short account of anomalous secondary growth in Gymnosperms, living and extinct.

6. Give a comparative account of the morphology of the megastrobilus in the conifers, and record any phylogenetic conclusions to which the facts may appear to lead.

7. Give the distinguishing characters of the following genera and draw attention to any points of special interest concerning their structure, distribution, or affinities:—

*Medullosa*, *Welwitschia* (= *Tumboa*), *Phyllocladus*, *Lagenostoma*, *Cycadeoidea*.

Assign each of the genera to its systematic position.

## THIRD PAPER

*The questions are of equal value*

*Attempt only THREE questions from EACH half*

### FIRST HALF

Examiner—MR. P. K. PARIJA, M.A., I.E.S.

1. Discuss the influence of external stimuli on the origin, form, and disposition of plant organs.

2. Describe the adaptation of roots to special functions, and the consequent changes of structure and form.

3. Discuss the phyllode theory of the monocotyledonous leaf.

4. Give a detailed description of the healing of wounds in plants.

5. Discuss the occurrence, cause, and significance of Anisophylly in Angiosperms.

Or,

Discuss the morphological value of arrested organs.

6. Discuss the principles underlying the distribution of mechanical tissues in plants.

## SECOND HALF

*Examiner*—PROF. S. P. AGHARKAR, M.A., PH.D., F.L.S.

*Illustrate your answer by neat sketches wherever necessary*

1. Give a general account of the systems of classification from Linnaeus to Hutchinson, pointing out clearly their differences and the causes to which they are due.

2. Give a general account of the Families included in the Pandanales by Engler, specially mentioning the characters which justify their position at the beginning of the Monocotyledons. Mention some Indian examples belonging to these and give their geographical distribution.

3. Describe the general characters of the Ranales as defined by Engler, pointing out the importance of the group in the phylogeny of the Monocotyledons. Enumerate any two important Families belonging to the group and give the geographical distribution of some Indian species belonging to these.

4. Give a general account of the Cucurbitaceae, mention the characters on which the subdivisions of this Family are based, and discuss its systematic position. Mention some economic and medicinal plants belonging to it and give their geographical distribution.

5. Write a short essay on 'Plant Associations.'

## FOURTH PAPER

### FIRST HALF

*Examiner*—PROF. S. C. MAHALANOBIS, B.Sc., F.R.S.E.

*Answer only THREE questions*

*The questions are of equal value*

1. Describe the process of photosynthesis in lower plants.\*

2. Discuss the rôle of tracheids in the transport of water.

3. Describe the various stages of vivipary and discuss their physiological significance.

4. Illustrate the use of (a) inflexibility, (b) inextensibility, and (c) incompressibility, for the maintenance of requisite strength of the plant-body.

### SECOND HALF

*Examiner*—MR. SURENDRACHANDRA BANERJI, M.A., B.Sc., F.L.S

*The questions are of equal value*

*Answer only two questions*

1. What are *endophytes*? Describe the life-history of a typical species.

2. Describe the morphological adaptations of a *tropical desert*, with special reference to *epigeal organs of absorption*.



3. Give a brief account of micro-phyto-plankton, with special reference to its product of assimilation and its bearing on the life of marine animals.

4. What are *hydrophytes*? Give a classification of them according to growth-forms.

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### FIFTH PAPER

#### FIRST HALF

*Examiner*—PROF. S. P. AGHARKAR, M.A., PH.D., F.L.S.

*The figures in the margin indicate full marks*

1. Write a short essay on 'variations and the importance ascribed to them in the theories of evolution.' 30

*Or,*

Discuss the inheritance of acquired characters and their importance for the production of new species of plants.

2. Give a short account of either 'Weissmann's theory of germinal selection' or 'Wagner's theory of geographical isolation' as a means for the production of new species of plants. 20

#### SECOND HALF

*Examiner*—MR. ILABANTA BANERJEE, M.Sc.

*The questions are of equal value*

1. Write a short essay on the fiber plants of India. refer them to their families, mention the parts of India where they are grown, and describe the method of the extraction of fiber from *any one* of them.

2. Give a five years' programme of the work you will undertake when called upon to produce an improved strain of *paddy* or *jute* suitable to a particular tract.

*Or,*

Write a short essay on interspecific hybridisation in plants, give examples, and indicate the morphological and cytological characters of the hybrids.

3. Give an account of the present state of our knowledge regarding the determination of sex in higher plants.

*Or,*

Write short notes on : (i) Linkage, (ii) Polyploidy, (iii) Tri-hybrid ratio, (iv) Parasynapsis, (v) Mutation, (vi) Allelomorphs, (vii) Non-disjunction and (viii) Genotypes.

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### (OLD COURSE)

#### FIRST PAPER

#### FIRST HALF

*Examiner*—MR. S. C. BANERJI, M.A., B.Sc., F.G.S.

*The questions are of equal value*

*Answer only two questions*

1. Give the characters of *Malvales* and discuss the affinities of *Malvaceæ*, *Sterculiaceæ*, and *Tiliaceæ*.

2. What are the differentiating characters of *Apocynaceæ* and *Asclepiadaceæ*? How is the latter subdivided into its genera?
3. Give reasons to include *Papilionaceæ*, *Cæsalpineæ*, and *Mimosiæ* under *Leguminosæ*.
4. Give the ordinal characters of *Rhizophorææ*.

## SECOND HALF

*Examiner*—PROF. S. P. AGHARKAR, M.A., PH.D., F.L.S.

*The questions are of equal value*

*Illustrate your answer by neat sketches wherever necessary*

1. What is siphonogamy? Explain the views held regarding its origin from the mode of fertilisation in *Gymnosperms*.
2. Give an account of the inflorescences, flowers, and fruits of either *Urticales* or *Parietales*, illustrating your answer by Indian examples.
3. Describe the vegetation of typical freshwater jheel from Bengal.

*Or,*

Describe the main features of the vegetation of the lower Gangetic plain.

## SECOND PAPER

## FIRST HALF

*Examiner*—MR. ILABANTA BANERJEE, M.Sc.

*The questions are of equal value*

1. Give an account of the morphological characters, the mode of reproduction, and the classification of the *Cedgoniaceæ*.

*Or,*

Characterise the main divisions of the *Cyanophyceæ*.

2. Give an account of our present-day knowledge of the cytology of the *Basidiomycetes*.

*Or,*

Give an outline of the classification of the *Gasteromycetales*, and describe the characters of the different families.

3. Give an account of the various factors that are responsible for disease resistance in plants. What are the advantages of immunity?

*Or,*

Describe the symptoms of 'late blight' of Potato on all parts of the host attacked. Give an account of the morphological characters of the fungus, and suggest control measures.

## SECOND HALF

*Examiner*—MR. GIRIJAPRASANNA MAJUMDAR, M.Sc.

*The questions are of equal value*

*THREE questions are to be attempted*

1. Trace the gradual evolution of leafy gametophyte in the *Bryophytes*.

*Or,*

Describe the life-history of *Anthoceros*, pointing out clearly 'the remarkable association of a primitive type of gametophyte with a highly developed sporophyte.'

2. If the Pteridophytes be arranged according to the complexity of the appendages and specially to their spore-producing parts the Lycopodiales will come first. Justify.

3. If Isoetes be removed from the Lycopodineæ, with what group of Vascular Cryptogams shall it be associated, and why?

4. The vascular structure of the mature shoot of the Lycopodiales is referable in origin, in almost all cases, to the non-medullated monostele. Justify.

Or,

Discuss the nature of the stele of Equisetum.

### THIRD PAPER

*The questions are of equal value*

*Attempt only THREE questions from EACH half*

#### FIRST HALF

*Examiner*—MR. P. K. PARIJA, M.A., I.E.S.

1. Write an essay on the sources of energy for the plant.
2. How would you explain the existence of polarity in plants?
3. Discuss the reversibility of enzyme reaction.

Or,

Classify movements of plants, pointing out the cause and significance of each class.

4. Discuss the effect of running water on the form and structure of plants.
5. Discuss the factors governing the form and structure of epiphytes.
6. Write an essay on the relation of micro-organisms of the soil and plant growth.

#### SECOND HALF

*Examiner*—PROF S. C. MAHALANOBIS, B.Sc., F.R.S.E.

1. Discuss the phylogeny of the vascular bundle.
2. Describe experimental evidences to substantiate the fact that paternal and maternal chromosomes become segregated in microspores and megaspores.
3. Describe the minute structure of typical Coal Measure fossils.
4. Give an account of the mode of termination of the ultimate ramifications of the vascular bundle system.

### FOURTH PAPER

#### (GROUP A)

*Illustrate your answers by neat sketches wherever necessary.*

*Answer any THREE questions from EACH half*

#### FIRST HALF

*Examiner*—PROF. S. P. AGHARKAR, M.A., PH.D., F.L.S.

*The questions are of equal value*

1. Discuss the morphology of the climbing organs of the Angiosperms, illustrating your answer by Indian examples.

2. What is a placenta? Illustrate your answer by reference to the placentation in Loranthaceæ, Papaveraceæ, Cucurbitaceæ, and Caryophyllaceæ.

3. Give a short account of the typical structure of the flower of the Orchidaceæ and indicate its principal variations. What features in the organisation of the flower justify the view that this family is the most highly advanced among the Monocotyledons?

4. Describe the range of floral structure in the Malvales, mentioning the principal families included in it and giving the geographical distribution of the most important economic plants belonging to them.

5. Give a general account of the climatic and edaphic factors affecting vegetation, illustrating your answer by examples, showing the effect produced by them on the internal anatomy of plants.

## SECOND HALF

*Examiner*—DR. SAHAYRAM BOSE, M.A., PH.D.

*The figures in the margin indicate full marks*

1. Which of the two groups of Ferns (Leptosporangiates and Eusporangiates) do you consider to be primitive? State clearly your reasons. Do *Osmunda* shew evidence of retrogression or progression? What evidence do you get from the anatomy of their growing tips? 18

2. Classify the Bryophyta, adding brief notes on the characteristic features of the more important families. 16

3. Describe fully the recent work on the water-conducting system in *Polytrichum*. How does it help to explain the relationship of the Moss with the Algæ? 18

4. Give a critical account of sexuality in Fungi, with special reference to the Basidiomycetes. 16

5. What is the Silver-leaf disease? To what is this usually due? What is the primary cause of 'silvering' of leaves in affected plants? 18

## FOURTH PAPER

(GROUP B)

*Examiner*—PROF. S. C. MAHALANOBIS, B.Sc., F.R.S.E.

*Answer only THREE questions from EACH half*

*The questions are of equal value*

## FIRST HALF

1. Describe a method of determining the influence of varying temperatures on the respiration of plants.

2. Describe the mode of formation and function of tyloses.

3. Discuss the theory of gravitational sense organs in plants.

4. Give an account of the movements of the plasmodia of myxomycetes under the influence of various stimuli. Explain their physiological significance.

## SECOND HALF

1. Describe fully the stages in the development of sieve tubes.
2. Trace the development of a fern sporangium, showing the successive stages leading to the formation of spores.
3. Describe the histology of the digestive glands of insectivorous plants.
4. Give a detailed account of the origin of the cambium from a primary procambial cylinder.

## PHYSIOLOGY

## FIRST PAPER

Examiners—{ Mr. PARIMALBIKAS SEN, M.Sc.  
 DR. U. N. BRAHMACHARI, M.A., M.D., Ph.D.,  
 RAI BAHADUR.  
 MR. NIBARANCHANDRA BHATTACHARYYA, M.A.,  
 B.Sc.

*The questions are of equal value*

*Not more than FOUR questions are to be answered, out of which  
 No. 5 must be one*

1. Give an account of the part played by Carotid Sinus in the regulation of circulation.
2. Write an essay on the Chemistry of Muscular Contraction.
3. Discuss the development of different varieties of white blood corpuscles.
4. Write notes on any three of the following :—
  - (a) Peroxidase.
  - (b) Donnan Membrane Equilibrium.
  - (c) Artificial Parthenogenesis.
  - (d) Bio-luminescence.
5. Discuss the chemical basis of specific immunological reactions.

## SECOND PAPER

Examiners—{ Mr. SAURINDRAMOHAN BANERJEE, M.B., M.Sc.  
 SIR NILRATAN SIRCAR, Kt., M.A., M.D., J.L.D.  
 D.C.L.  
 DR. BIJALIBHARI SARKAR, D.Sc., F.R.S.F.

*The questions are of equal value*

*Only FOUR questions are to be attempted*

1. Describe, in detail, the peripheral (both afferent and efferent) and central mechanisms which enable an animal to maintain its posture and equilibrium.

2. Discuss critically the proofs that have been adduced as regards the presence or absence of a third substance in a nerve-muscle junction.

3. Describe, in detail, the extra-pyramidal motor tracts in the spinal cord, their modes of origin and termination.

What do you know of the functions of these motor tracts?

4. Give a detailed account of the various changes that take place in a nerve during and after the passage of a nerve impulse along it.

5. What are the recent views regarding the intimate nature of muscular contraction?

### THIRD PAPER

Examiners— { LT.-COL. A. C. MACGILCHRIST, M.A., D.Sc.,  
M.D., F.R.C.P.  
PROF. S. C. MAHALANOBIS, B.Sc., F.R.S.E.  
MR. NARENDRAMOHAN BOSE, M.Sc.

*The questions are of equal value*

*Answer only FIVE questions*

1. Discuss the functions of the labyrinth with special reference to the mechanism of postural reflexes.

2. Give an account of the laws of color-mixing. Describe and discuss any method of graphical representation of the results of color-mixing.

3. Discuss the efficiency of the various sense-organs, stating briefly the recent researches of Adrian on this subject.

4. Discuss the laws of Johannes Müller, Weber, and Fechner on the relationship between stimuli and sensations, and examine critically the assumption on which Fechner's law is based.

5. Discuss the changes that occur in the retina during activity.

6. What is the nerve supply of the Dilator Pupillæ muscle? Trace the course of the nerve impulse from nerve-centre to muscle.

### FOURTH PAPER

Examiners— { MR. SATYENDRAPROSAD NIYOGI, M.B.  
MR. NIBARANCHANDRA BHATTACHARYYA, M.A.,  
B.Sc.  
RAI SATISCHANDRA BANERJEE, BAHADUR.

*The questions are of equal value*

*Only THREE questions are to be attempted*

1. Give a detailed account of the katabolism of fatty acids in the animal body and state how far the process can be explained by the experimental investigations of Knoop and Embden.

2. Give an account of the various factors that influence the endogenous uric acid excretion.

3. What is indole? How is it related to tryptophane, skatole, indoxyl, and urinary indican? Give an account of the evidence upon which the chemical relationships are based, and discuss their physiological significance.

4. Describe the relationship of the proteins to growth and maintenance of life.

## ANTHROPOLOGY

## FIRST PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—MR. ANATHNATH CHATTERJEE, M.B.B.S.*Answer ANY THREE*

1. Give the classification of the Primates and state, in detail, the skeletal features that are characteristic of the Hominidæ.
2. Discuss the homology of the bones of the upper and lower extremities in man.
3. Describe the distribution of hair on the human body and account, if possible, for any peculiarities that you know of.
4. Discuss the structural changes that have taken place in the development of the human cranium.
5. Give an account of the fossil simians, with special reference to those found in the Siwalik deposits in India.

## SECOND HALF

*Examiner*—DR. B. S. GUHA, M.A., PH.D.*Answer ANY THREE*

1. Describe the characters of the Piltdown man.
2. Give your view on the place of origin of the Neanderthal race and on the migrations of the race that subsequently took place.
3. Describe the main characters of the different human types inhabiting Europe during the Upper Palæolithic period, and give an account of the various routes of their migrations.
4. Describe the characters of the modern human mandible including the teeth, and compare them with those of Neanderthal man and of any fossil simian.
5. Write short notes on:—
  - (1) The Pekin man.
  - (2) *Pithecanthropus erectus*.
  - (3) *Homo rhodesiensis*.
  - (4) *Propliopithecus haeckelii*.

## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—RAI BAHADUR L. K. A. IYER, B.A., L.T.*Answer ANY THREE questions*

1. Discuss the problem of the differentiation of mankind.
2. Give an account of the racial types of man found in New Guinea.

3. Mention some of the striking effects of environment upon the life of (a) the Eskimo, (b) the Pueblo Indians.
4. Give a brief sketch of the racial history of Indonesia or Asia Minor.
5. Describe the geographical distribution and varieties of megalithic monuments in India, and consider their relation to the ethnic problem.

## SECOND HALF

*Examiner*—DR. J. H. HUTTON, M.A., D.Sc., I.C.S.

*Answer ANY THREE questions*

1. Summarize briefly the contribution to anthropology of any four of the following writers, indicating their approximate dates:—  
Lucretius, Tyson, Blumenbach, Camper, Retzius, Grattan, Broca, Tyler, Morgan and Rivers.
2. Give some account of the oceanic ulotrichous races. How do you account for their geographical location in relation to other ulotrichi? To what extent do you regard this stock as represented in India?
3. Examine, in the light of specific examples, the following statement:—  
'Language is an aid to the historian, not to the ethnologist.'
4. Deniker observes that the distribution of different cranial forms on the surface of the earth presents a certain regularity. Amplify this statement.
5. 'The anthropologist,' says Deniker, 'tries to determine by the anthropological analysis of each of the ethnic groups of the races which constitute it.' Apply this analysis to any three of the following: Andamanese, Toda, Ainu, Malagasy, Basque, Telegu, Bengali.

## THIRD PAPER

## FIRST HALF

*Examiner*—DR. P. MITRA, M.A., PH.D., F.R.A.I.

*The questions are of equal value*

*Only THREE questions are to be attempted*

1. What are the criteria for distinguishing and classifying Palæolithic cultures? How could Indian Palæoliths be classified by comparisons of technique.
2. How did the art of Old Stone Age develop and what are its best examples?
3. What are the probable sources of origin of the elements of civilisation associated with Neolithic culture?
4. Write short notes on any three of the following:—  
Dolmen, Rothenhausen, Hallstatt, Bandkeramik, Kjoekkenmodding.
5. Give a brief sketch of the Indus Valley culture, bringing out its relationship with other cultures of the Near East.



## SECOND HALF

*Examiner*—DR. B. S. GUHA, M.A., PH.D.*The questions are of equal value**Answer ANY FOUR of the following questions*

1. What are the various forms of Agriculture? How far did the artificial control of supply of water and domestication of animals help in the development of Agriculture?
2. What is the origin of Dress? Was it due to Modesty, Protection, or Decoration? Describe the part played by each in the evolution of Dress.
3. What part has Transport played in the development of culture? Describe the means of Transport used by the people living in the Arctic regions.
4. Describe the various types of boats and canoes used by the people in Oceania. What is meant by the outrigger canoe and how is it distributed?
5. Discuss the various theories of the origin of Art. How far is it possible to correlate the material and socio-religious sides of life with the evolution of Art?

## FOURTH PAPER

## FIRST HALF

*Examiner*—RAI BAHADUR S. C. RAY, M.A., B.L.*The figures in the margin indicate full marks.*

1. Describe, with examples, the various forms which social grouping has taken among the peoples of India and the nature and functions of each of those groups. 22
  2. Write short notes on the different theories of the origin of Marriage, giving your own views supported by your reasons. 14
- Or,*
- Discuss the correctness of the proposition that 'Mother-right preceded Father-right.'
3. Give an account of the origin and development of ideas of Property. 14

## SECOND HALF

*Examiner*—MR. TARAKCHANDRA DAS, M.A.*The questions are of equal value**Answer ANY THREE of the following questions*

1. Describe the essential beliefs on which totemism rests. Give examples from India and Australia.

2. Describe the ideas of primitive man about 'soul.' How did he arrive at this concept? Illustrate your answer.
3. Discuss the relationship of magic with religion. Illustrate.
4. Analyse the religious beliefs and practices of any primitive tribe you know of and show how they influence the life and activities of its individual members.
5. Write a note on the method of the disposal of the dead among the Nagas.

## (GROUP A)

## FIFTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—RAI BAHADUR L. T. A. IYER, B.A., L.T.*Answer ANY THREE questions*

1. Write a short note on 'Natural Selection' as a factor in evolution.
2. Write an essay on the physical basis of heredity.
3. What are the human traits which are believed to be inherited in simple Mendelian manner?
4. 'Eugenics is a panacea that will cure human ills; it is rather a dangerous sword that may turn its edge against those who rely on its strength.'

Discuss this statement with illustrations.

5. Write a dissertation on the contribution of Darwin and Weismann to the theory of evolution.

## SECOND HALF

*Examiner*—SIR NILRATAN SARKAR, Kt., M.A., M.D., LL.D., D.C.L.*Answer ANY TWO questions*

1. What is meant by 'race'? Describe some of the conditions which lead to (1) race-degeneration, and (2) race-extinction. How can they be prevented?
2. Write a dissertation on the influence of environment on racial character with illustrations.
3. 'Isolation has been the great factor or at any rate an essential factor in the differentiation of races: while mingling and merging have clearly resulted in the production of many new races.' Give instances in support of this statement.
4. Trace the main steps through which intelligence has been built up in the process of evolution.

## (GROUP A)

## SIXTH PAPER

*Examiners*—{ MR. TARAKCHANDRA RAYCHAUDHURI, M.A.  
MR. P. C. MAHALANOBIS, B.Sc.

*The questions are of equal value*

*Only FIVE questions to be attempted*

1. What racial elements have entered in the composition of the modern population of Chinese Turkestan?
2. Distinguish between the different branches of the Mongolian stock. Where would you locate the cradle land of the Mongol? Discuss the question.
3. 'Peoples of the Caucasian division had already spread to the utmost confines of south-east Asia in remote prehistoric times.' Discuss.
4. What ethnic elements have entered in the Naga country? Draw a map to show the location of the different members of the Naga tribe.
5. Discuss the question of the existence of a Negrito substratum in the Indian population.
6. Write a note on the different methods of measuring cranial capacity.
7. You are asked to collect anthropometric measurements of three Indian castes. Discuss what size of sample you would choose and explain briefly how you would analyse the data?
8. Write notes on *any three* of the following: (a) mode, (b) significance of the differences in average values, (c) skew distributions, (d) facial angle (according to the Frankfort Agreement), (e) squatting facet.

## (GROUP B)

## FIFTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—DR. P. MITRA, M.A., PH.D.

*Only THREE questions are to be attempted*

1. What are the economic and biological factors to be taken into consideration in the study of a primitive group?
2. Distinguish clearly between the following words with examples: community, sib, clan, gens, and tribe. How do tribes grow and decay? Illustrate from Indian examples.
3. Write a note on Khasi matriarchy. How does it differ from that obtaining in Malabar?
4. Discuss with Indian examples the phenomenon of dual division in primitive communities.
5. How far does the geographical method and culture area concept help in the study of social origins?

## SECOND HALF

*Examiner*—MR. K. P. CHATTERJEE, M.A.

*Attempt only THREE questions*

1. Define (i) group marriage, (ii) sexual communism, (iii) polyandry. Give examples. How would you classify the (a) tali ketu kalyanan and (b) sambhandham union of the Nayars? State the facts in support of your views, in some detail.

2. Discuss the relative importance of the (a) sexual and (b) economic factor in the origin of *any two* of the following :—

(i) Polygyny, (ii) levirate, (iii) sororate, (iv) cross-cousin marriage, and (v) polyandry of the non-fraternal type. Illustrate your arguments.

3. Discuss whether Rivers' hypothesis of a Melanesian gerontocracy requires to be modified in view of the recent discovery of Ambrym class systems. Illustrate your arguments.

*Or,*

4. The existence of certain kinship terms and practices, among some of the Chotanagpore tribes, similar to terms and usages found in Pentecost Islands in Melanesia, have led some investigators to formulate the view that the earlier social organisation of these tribes was like that of Pentecost. Write a short essay on the above subject, incorporating the more important data available, and indicating your own conclusions.

5. Describe and discuss the rules of inheritance and succession among Nagas.

(GROUP B)

## SIXTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner*—MR. TARAKCHANDRA DAS, M.A.

*Answer ANY THREE of the following questions*

1. Describe, in detail, the Angami system of social organisation. What traces of dual organisation are found among the Naga tribes of Assam?

2. Trace the origin and distribution of head-hunting in Assam, and the surrounding tracts with special reference to the Nagas. What part does it play in the life of the individual and the community?

3. What similar traits of culture occur among the Nagas and some of the other tribes of Assam, Burma, and the Indian Archipelago? How do you account for this similarity?

4. Give a comparative estimate of the beliefs of the different Naga tribes of Assam regarding the origin of the Earth and man.

5. Write an essay on the material culture of the Lhota Nagas.

## SECOND HALF

*Examiner*—MR. J. P. MILLS, M.A., I.C.S.

*Answer ANY THREE*

1. Compare the Ao and Sema Naga systems of village government.

2. Give an account of the Lhota Naga ceremony of *oyantsoa*.

3. Discuss the effects of the impact of alien culture on the Ao Nagas.
4. Discuss fully the use of stone by the Angami Nagas, with special reference to ceremonial use.
5. What do you know of (1) *Oha*, (2) the system of chieftainship among the Sema Nagas, (3) Angami dress and ornaments, (4) the Ao belief in an after-life, (5) Lhota Naga feasts of merit.

## ZOOLOGY

### FIRST PAPER

#### FIRST HALF

*Examiners*— { DR. BAINI PRASAD, D.Sc.  
MR. D. MUKHERJEE, M.Sc.

*The questions are of equal value*

*Not more than THREE questions should be attempted*

1. Write an historical account of the development and present position of the Cell Theory.
2. What are the characteristics of the Deep-sea Animals?
3. What are your views in reference to the Inheritance of Acquired Characters?
4. Write a short account of the various types of Mimicry.
5. Write short notes on *any five* of the following :—  
(a) Pterodactyl, (b) Nummulites, (c) Wallace's Line, (d) Protohippus, (e) Convergence in Evolution, (f) Pædogensis, (g) Palæarctic Region.

#### SECOND HALF

*Examiners*— { DR. H. N. RAY, Ph.D.  
DR. B. K. DAS, D.Sc.

*Illustrate your answers by diagrams wherever necessary*

Write an essay on *one* of the following subjects :—

- (1) The influence of Mendel's discovery on the Evolution Theory.
- (2) Protective Coloration and Mimicry.
- (3) Coral Reefs and Atolls.
- (4) Animal Associations.

### SECOND PAPER

#### FIRST HALF

*Examiners*— { DR. EKENDRANATH GHOSH, M.B.  
MR. D. MUKHERJEE, M.Sc.

*The questions are of equal value*

*Only two questions to be attempted*

1. Discuss the full significance of Meiosis. How does it differ from Mitosis?

2. State what you know of 'sex-limited character?' Discuss its bearing on Mendelism.
3. Discuss the various views on Golgi bodies.
4. Describe fully the phenomenon of 'the crossing over of the Genes.'

## SECOND HALF

*Examiners*— { PROF. GEORGE MATHAI, S.C. (PUNJAB).  
DR. H. K. MOOKERJEE, D.Sc.

*Attempt ANY THREE questions*

*The questions are of equal value*

*Illustrate your answers with diagrams*

1. Discuss the development of placenta in mammalia.
2. Trace briefly the evolutionary history of the formation of the heart and its great vessels in the vertebrate series.
3. Give a brief account of the development of the vertebral column of any Amphibian.
4. Describe, in detail, the appearance during development of asymmetry in *Amphioxus*.
5. Give a comparative account of the formation of the germ-layers in Frog, Chick, and Rabbit.

## THIRD PAPER

## FIRST HALF

*Examiners*— { RAI BAHADUR DR. G. C. CHATTERJEE, M.B.  
DR. H. N. RAY, Ph.D.

*The questions are of equal value*

*Answer ANY THREE*

*Illustrate your answers with diagrams*

1. Describe the distribution and mode of formation of the different types of spicules in the Sponges.
2. Give a comparative account of the sensory organs in the Coelenterata.
3. Give a comprehensive account of the structural modifications in the flat-worms brought about by the parasitic mode of life.
4. Describe, in detail, the life-cycle of any Sporozoa you know.
5. What is trypanosomiasis? Give the life-cycle of *Trypanosoma lewisi*.

## SECOND HALF

*Examiners*— { DR. KARM NARAYAN BAHL, D.Sc., D.Phil.  
MR. D. MUKHERJEE, M.Sc.

*The questions are of equal value*

*Not more than two questions to be attempted*

1. What is the distinction between Nephridia and Coelomoducts? Give an account of the chief modifications of these organs in the Annelida.

## SECOND PAPER

Examiners— { MR. SARATLAL BISWAS, M.Sc.  
 { PROF. K. K. MATHUR.

*The figures in the margin indicate full marks*

Try THREE questions from Part A and THREE from Part B

## PART A

1. Give an account of the relation between the optical characters of a crystal and its symmetry. 16
2. Describe the chemical and physical properties and the modes of occurrence of the following minerals :— 18  
 Clino-enstatite, leucoxene, cancrinite, barkevikite, tridymite, and topaz.
3. Describe special tests for distinguishing between the following minerals in microscopic sections :— 16  
 (a) Sericite and talc.  
 (b) Calcite and dolomite.  
 (c) Felspar and nepheline in a microcrystalline groundmass.
4. Give a summarised account of the modern conception of crystal structure and establish the law of rationality of indices from it. 16
5. Discuss the various theories propounded to explain the constitutional formulas of Albite and Anorthite as the end members of a typical isomorphous series. 16

## PART B

6. Give an account of the nature and origin of the various types of clay and clay-rocks found in nature. 16
7. Explain the various modes of occurrence of calcium carbonate in nature and indicate their modes of origin wherever possible. 16
8. Give an account of the rocks which contain feldspathoids as major constituents. 16
9. Is it possible for an igneous rock to contain quartz along with olivine or a feldspathoid? Give reasons for your answer. 16
10. Write notes on the following rock types :— 18  
 Ankerite, allivalite, calciphyre, adamellite, monchiquite, and kedarite.

## THIRD PAPER

Examiners— { MR. HEMCHANDRA DASGUPTA, M.A., F.G.S.  
 { „ G. N. WADIA.

*The questions are of equal value*

N.B.—FIVE questions are to be attempted, at least two being selected from EACH group.

## GROUP A

1. It has been suggested that the limit of the older Palaeozoic rocks should be drawn at the base of the Silurian and not at the base of the

Devonian. Criticise this opinion and describe the older Palaeozoic rocks of the Himalayan region.

2. Give an account of the recent works that have been done in connection with the pre-Tertiary rocks of the Simla region.

3. Give an account of the basic igneous intrusives occurring in different parts of India and the economic mineral deposits, ores, etc., associated with them.

4. Write a systematic account of the geology of any area you have personally visited and worked in.

### GROUPE B

5. Give the distinctive characters of Permian and Triassic ammonites and state in what parts of India fossil ammonites are utilised for zoning purposes. Give lists of the zones.

6. (a) Give an account of the Psilophytales.

(b) Discuss the position of the Pteridosperms in the plant kingdom and their relation to the Filicales.

7. Give an account of the geological history of the reptiles and illustrate your answer with special reference to the Indian Empire.

8. Write notes on the following and state what you know regarding their occurrence in India :—

*Acanthoceras*, *Amusium*, *Bellerophon*, *Cardita*, *Danæopsis*, *Estheria*, *Juvavites*, *Oxyrhina*, *Samaropsis*, and *Titanosaurus*.

### FOURTH PAPER.

#### GROUP A

Examiners—{ Mr. HEMCHANDRA DASGUPTA, M.A., F.G.S.  
,, G. N. WADIA.

#### FOSSIL MAMMALS

*The questions are of equal value*

*Any FIVE questions out of these carry full marks*

1. Write a note on the recent discoveries of fossil Man in various parts of the world.

2. Explain, with sketches, the evolution of the mammalian molar tooth, describing the different intermediate stages.

3. What are the important *Carnivora* genera found in the Siwalik deposits of India?

4. Give the stratigraphic position of the following mammals and their range in time, noting the systematic position of each genus :—

*Chalicotherium*; *Machaerodus*, *Merychippus*; *Merycopotamus*; *Dryopithecus*; *Dorcatherium*; *Potamochoerus*; *Telmatoxys*; *Leptobos*; and *Megatherium*.

5. Describe the features by which you would distinguish between the vertebrae of the different regions of a mammalian vertebral column. State how you would distinguish between the following limb-bones of a mammal :—  
Humerus, femur, and ulna.

6. Give an account of the Mesozoic mammalian life and point out the peculiarities of the animals regarding their dentition. State all that you know about their occurrence.

7. Give an account of the Karnul cave fauna and discuss how you would fix its age.



## GROUP B

Examiners—{MR. NIRMALNATH CHATTERJEE, M.Sc.  
DR. G. DE P. COTTER.

## COAL

*The figures in the margin indicate full marks*

*Only six questions to be attempted*

1. Under what conditions were coal seams of Gondwana and Tertiary age laid down in India? What are the typical fossils of the Damudas and the Panchets? 16
2. Discuss the manufacture of fuel oil from coal, stating what type of coal is most suitable for this purpose, and what are the prospects of commercial success. 17
3. Four constituents are said to have been recognised in most coals. What are they? Enumerate briefly their physical and chemical properties. 16
4. What do you understand by the following terms?—  
Fixed carbon; Volatile hydro-carbons; Inherent moisture; Fixed sulphur; Volatile sulphur and non-combustible sulphur. 17  
Describe briefly how you would ascertain the above values.
5. Give a short account of the Jherria coalfield. 17
6. What are the chief chemical and physical differences between peat, lignite, bituminous coal, and anthracite? Name some localities in India where the abovementioned types of coal are found. 17
7. State how you would proceed to make a section of coal for microscopic investigation by transmitted as well as by reflected light. 16
8. Write an essay on the utilisation of pulverised coal as fuel. 17  
Are there any instances of pulverised coal being utilised in India? Taking into account recent research work in England on the utilisation of pulverised coal, what is your opinion of its use being generally adopted?
9. What are the important properties of metallurgical coke suitable for blast furnaces? Can you recommend the high grade coals of Upper Assam for the manufacture of metallurgical coke? 16  
What is 'Natural Coke' and how is it produced? Give some Indian examples.

## GROUP C

Examiners—{MR. SARATLAL BISWAS, M.Sc.  
PROF. K. K. MATHUR.

## IGNEOUS ROCKS

*The questions are of equal value*

*Answer FIVE questions only*

1. Give a short review of the attempts that have been made to classify the igneous rocks, with special notes on the C.I.P.W. Scheme and the new system of petrography proposed by Shand.
2. Explain the various methods which have been used for the quantitative estimation of minerals in rocks.
3. Describe a method of estimating the percentages of alkalis in a rock, mentioning the precautions which must be taken during the operations.

4. Discuss the effect of the addition of foreign sedimentary rocks on the progress of crystallization of a magma.
5. Write notes on the following rock types :—  
Essexite, camptonite, alnoite, and granodiorite.
6. Give an account of Bowen's theory regarding the origin of igneous rocks, and state how this theory is affected by the results obtained by the study of the rocks in India.
7. Describe the petrology of a petrographic province in India with which you may be familiar.
8. Give an account of the pre-mesozoic volcanic activity in India.

## GROUP D

Examiners—{ DR. M. S. KRISHNAN, M.A., A.R.C.S., PH.D.  
(LOND.).  
MR. HEMCHANDRA DASGUPTA, M.A., F.G.S.

## METAMORPHIC ROCKS

*The questions are of equal value*

*Answer SIX questions only*

1. What is the difference between Katamorphism and Anamorphism? What changes take place when average igneous rocks are broken up and re-distributed katamorphically?
2. Give an outline of the classification of metamorphic rocks as proposed by Grubenmann and Eskola.
3. Examine the mineralogical and structural changes produced in the different stages of anamorphism of clays.
4. Enumerate the minerals which can be considered as schist-forming. Under what conditions are schists produced? Mention the different kinds of schists resulting from the metamorphism of igneous and of sedimentary rocks.
5. Discuss the criteria which can be used in the field and in the laboratory for distinguishing between the metamorphic rocks derived from igneous rocks and those derived from sedimentary rocks.
6. Explain the following terms :—  
Porphyroblastic, Autoclastic, Meso-zone, Calciphyre, Knotenschiefer, Epidiorite, Saussurite.
7. Write an essay on the Dharwar System of rocks and note the special features of the System as developed in Mysore and the Central Provinces.
8. Explain the process involved in serpentinitisation, kaolinisation, dolomitisation, silicification, and mylonitisation. Illustrate your answer with Indian examples.

## EXPERIMENTAL PSYCHOLOGY

## FIRST PAPER

*The questions are of equal value*

*Answer only THREE questions from each half*

Examiner—MR. MANMATHANATH BANERJEE, M.Sc.

## FIRST HALF

1. Discuss the influence of autaroids on emotional tone.
2. Give an account of position receptors.

3. Criticise the doctrine of specific nerve energy with reference to cutaneous sensations.
4. Discuss the rôle of the cerebellum in synergic control of the muscles.

### SECOND HALF

*Examiner*—DR. SUHRITCHANDRA MITRA, M.A., D.PHIL.

1. Trace the principal lines of development of Experimental Psychology from the beginning of the 20th century to the present time.
2. Write a critical estimate of the methods of experiment on *thought-processes*.
3. Write a short essay on the conception of Memory in the Psychology of the present day.
4. Write a brief note on *one* of the following :—
  - (i) Recent experiments on perception.
  - (ii) Recent criticism of the *James-Lange theory of emotion*.
  - (iii) Current views of *instinct*.
5. Discuss the value of *one* of the following :—
  - (i) Psycho-Galvanic experiments for the study of emotions.
  - (ii) Ergography as a method for the determination of *mental fatigue*.
  - (iii) Introspection.

### SECOND PAPER

*The questions are of equal value*

#### FIRST HALF

*Examiner*—DR. GIRINDRASEKHAR BOSE, D.Sc.

*Try ANY THREE*

1. Illustrate the various degrees of mental dissociation.
2. Discuss the question of personality from the mechanistic and purposive points of view.
3. Give a resumé of the psychopathology of delusions and hallucinations.
4. Discuss the relation between Schizophrenia and Introversion.
5. Give an account of symbolisation in neuroses and psychoses.

#### SECOND HALF

*Examiner*—DR. B. C. GHOSH, M.A., M.B.

*Only THREE questions are to be attempted.*

1. Discuss Freud's interpretation of Anxiety-Dreams. What light do the Anxiety-Dreams throw on the general theory of Dreams?
2. Outline the main stages of normal Libido development.
3. Compare and contrast the psychological mechanisms of *Conversion hysteria* and of *Obsession neuroses*.

4. Write a short essay on the Therapeutic principles of Psycho-analysis.

5. Write notes on :—

(a) Hypnagogic hallucination, (b) Narcissism, (c) Super-ego, (d) Hypnotic sleep, (e) 'Meta-psychology.'

### THIRD PAPER

*The questions are of equal value*

#### FIRST HALF

*Examiner*—MR. MOHANLAL GANGULI, M.Sc.

*Answer ANY THREE of the following questions*

1. Describe fully the different types of animal behaviour you have studied. Give concrete illustrations.
2. What is a 'compound eye'? Compare its mechanism of perception with the binocular perception of human beings.
3. Discuss broadly the question of the inheritance of acquired characters and illustrate your answer.
4. Discuss critically Loeb's theory of instinct.
5. Write short notes on *any four* of the following :—
  - (i) Otolith.
  - (ii) Telæsthetic taste.
  - (iii) Lateral-line-canal.
  - (iv) Chordotonal organ.
  - (v) Kinæsthetic memory.
  - (vi) Fabre's suggestion regarding smell stimuli in insects.

#### SECOND HALF

*Examiner*—MR. HARIDAS BHATTACHARYYA, M.A.

*Answer ANY THREE of the following questions*

1. What, according to Hobhouse, is the essence of mind? What is the principle that he follows in tracing the evolution of mind?
2. Analyse fully Hobhouse's conception of the Practical judgment. How does it differ from Logical judgment?
3. Write a short essay on the use of *language* by animals.
4. Write a short essay on the psychology of chimpanzees with special reference to their emotional life.
5. Contrast Thorndike's and Köhler's positions with regard to the facts of imitation in human and animal behaviour.

## FOURTH PAPER

*The questions are of equal value*

## FIRST HALF

*Examiner—DR. HARIPADA MAITI, M.A.**Answer THREE questions only*

1. (a) Discuss the nature and functions of children's play.  
(b) Describe some fundamental 'Social attitudes' of pre-school children as expressed in their group-plays.
2. (a) Explain the chief characteristics of children's thinking as contrasted with the thinking of civilized adults.  
(b) Trace the growth of 'Verbal activity' in children.
3. Examine critically the various theories regarding the causes of juvenile delinquencies.
4. (a) 'Perceptions are the outcome of gradual growth through trial and error experience in children.'  
Cite experimental evidence for and against the statement.  
(b) Examine the statement of Koffka that children imitate only 'what they understand'
5. Enumerate briefly the chief contributions to the child-study by the different schools of psychologists since 1910.

## SECOND HALF

*Examiner—MR. GOPESWAR PAL, M.Sc.**Answer THREE questions from this half*

1. Describe typical *learning curves* and discuss the meaning of their characteristic features.  
Refer to some of the best-known experimental work which has been done upon the learning process.
  2. Describe the accepted methods of measuring (a) memory span, and (b) permanent memory; and discuss the importance of these investigations from the point of view of education.
  3. Estimate the value of the current processes of measurement in education known as (a) mental tests, and (b) achievement tests.
  4. Name and characterise two or three of the most recent developments of educational technique in schools; and discuss the psychological theory underlying them.
  5. (a) Discuss briefly *three* of the following :—  
 (i) Group measures.  
 (ii) Measures of group differences.  
 (iii) Correlation.  
 (iv) Variable and constant errors.  
 (v) The reliability of measures.  
*Or,*  
 (b) To what extent does 'transfer of training' obtain, and how can it be demonstrated and measured?  
*Or,*  
 (c) Describe some of the experimental work which has been done upon mental work and fatigue, and estimate the educational value of the results.
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# M. L. Examination

## 1931

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### JURISPRUDENCE

*Examiner*—MR. ARTHUR BROWN, M.A., LL.D., BAR-AT-LAW.

*Candidates may only attempt six questions*

1. Discuss the view that the doctrine of the sovereignty of the State may be compared with that of the natural rights of man, as being only a phase in the evolution of legal ideas.

2. Write a note on the 'discretion of the Court' and show how the development of this conception assisted legal progress.

3. 'The overthrow of Southcote's Case and the old common law (of Bailment) may be said to date from *Coggs v. Bernard* (2 Anne, A.D. 1703).' (*Holmes*.) Expound and comment.

4. Write a note on the actual sources of the English common law, considered in relation to theories of Law and Sovereignty.

5. Write a note on the manner in which the Renaissance affected the general course of European legal history.

6. 'Persons are of two sorts, persons natural created by God . . . and persons incorporate or politique created by the policy of man (and therefore they are called bodies politique); and those be of two sorts, viz., either sole, or aggregate of many.' (*Coke, quoted by Salmond*.) Expound, comment, and criticize.

7. Write notes on any three of the following from the point of view of their work and influence in matters of jurisprudence: (a) Gratian, (b) François Hotman, (c) Pothier, (d) Cornelis van Bynkershoek, (e) Thibaut.

8. 'The history of property is in the last analysis the history of human nature . . . being at first collective, it becomes individual and egoistic, and finally tends to take its place in society and the State.' (*Miraglia*.) Expound and comment.

9. Write a note on Personality of Laws under the Carolingian Empire.

10. 'Rights and duties are necessarily correlative. . . . There can be no wrong unless there is someone who is wronged, that is to say, whose right has been violated.' (*Salmond*.)

'A criminal proceeding is one designed for the punishment of a wrong done by the defendant, and a civil proceeding is one designed for the enforcement of a right vested in the plaintiff.' (*Salmond*.)

Reconcile these dicta. Discuss the latter in the light of: (a) the *actio furti* of Roman Law, (b) a private informer's action for penalties.

11. Discuss the accuracy of the maxim that every man is presumed to intend the natural consequences of his own acts.

12. 'In English law possession is a good title of right against anyone who cannot show a better. . . . Many other legal systems, however, go much further than this.' (*Salmond*.) Expound.

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## HINDU LAW

**Examiner—MR. JYOTIPRASAD SARBADHIKARI, M.A., B.L.**

*The questions are of equal value*

1. Indicate briefly the difference in the sources of law (*dharma*) as enumerated respectively in Kautilya, the Dharmasutras, Manu, and Yajñavalkya.

*Or,*

Discuss how far king-made laws are recognised as one of the sources of law in Kautilya, Manu, Yajñavalkya, and Narada.

2. 'In the history of the word "*Sapinda*" is wrapped up the whole history of the law of inheritance.' Develop.

*Or,*

Discuss whether adoption in Hindu Law is more a temporal or a spiritual institution.

3. 'Under the Hindu system of law, clear proof of usage will outweigh the written text of the law.' Discuss how far this is a correct statement of the doctrine of Hindu jurisprudence in case of conflict between customs and sacred texts.

*Or,*

Point out the difference between the Mitakshara and the Dayabhaga in regard to (a) treatment of women's rights, (b) conception of property, and (c) conception of partition and co-ownership.

4. Discuss, on reference to leading cases, the law of surrender of a widow's estate. What is the genesis of the doctrine? Can a widow transfer for value the entire estate in favour of the next male reversioner?

*Or,*

Discuss, on reference to leading cases, the law relating to alienations of the widow's estate. Explain what is meant by 'benefit of the estate.' Can a widow alienate a portion of the immovable property in order to invest the sale proceeds in a business yielding a larger income?

5. Discuss, giving reasons, who would be the preferential heir according to the two schools, as between—

- (a) sonless widowed daughter and married daughter with male issue (both in regard to father's and mother's property);
- (b) sister's son and paternal uncle;
- (c) nephew and paternal uncle;
- (d) brother's great-grandson and paternal uncle;
- (e) son's daughter's son and paternal uncle;
- (f) great-grandfather's daughter's son and maternal uncle;
- (g) widow and reunited brother;
- (h) father and brother both reunited;
- (i) son and daughter's daughter (in regard to mother's *stridhan*);
- (j) widow and brother (in regard to an impartible estate in a joint family)?

## MUHAMMADAN LAW

**Examiner—THE HON'BLE JUSTICE SIR Z. R. Z. SUHRAWARDY, KT., M.A., B.L., BAR.-AT-LAW.**

*Answer the FIRST TWO questions and ANY THREE out of the rest*

*The questions are of equal value*

1. Give a historical sketch of the schism into the Sunni and Shia schools of law. Note the fundamental principles on which the two systems differ as regards the sources of law.

2. Notice the statutes from the commencement of the British rule guaranteeing application of Muhammadan Law to Muhammadans. How far is that law applicable to Muhammadans in the Presidency Towns and in the mufassil? Give some instances of departure from strict Muhammadan Law by British Courts.

3. Discuss the rights of a creditor of a deceased Muhammadan against (a) one of the heirs in possession of his property, (b) transference of the share of an heir with notice of the debt, (c) widow in possession of his property in lieu of unpaid dower.

4. Write a dissertation on the doctrine of Analogy in Sunni law.

5. How far is marriage a religious institution with Muslims? Distinguish between illegal and invalid marriages, giving reasons and with reference to reported cases. How far is marriage allowable between different sects and with non-Muslims. Discuss the status of the issue of such unions according to the Sunni and Sh'a law.

6. Enumerate the causes of exclusion from inheritance. How far has Act XXI of 1850 modified the rules of Muhammadan Law? Does the operation of the Act extend to the heirs of the apostate, otherwise entitled to inherit when the succession opens? Discuss the case law noticing the latest pronouncement of the Privy Council on the subject.

7. Define, adding explanatory notes :—

Radd, Aul, Iddat, Rajat, Mihr-i-misl, Khula, Khalit, Izn, Wali-i-jabir, Maraz-ul-maut.

## ROMAN LAW

Examiner—DR. S. C. BAGCHI, B.A., LL.B., LL.D.,  
BAR.-AT-LAW.

*Four questions and no more need be attempted*

*The questions are of equal value*

1. Account for the origin of the Comitia Tributa, and explain its connexion with the Concilia Plebis. How do you explain the working of three co-existing legislative assemblies?

2. 'The extension of the solemnities of *mancipium* to diverse transactions manifests great poverty of invention on the part of the early Roman jurists.' Discuss.

3. A slave is held by X and Y in the belief that he is their common property. He is in fact the property of X. The slave receives two sums of money from other persons. One is a present, the other is payment for services for which the slave had agreed. To whom do these sums of money belong? Why? How, if in each case the purchaser believing him to be the property of Y had given him the property expressly for Y?

4. What was *litis contestatio*? When did it occur? Consider the procedural consequences which follow from the conception of it as a contract between the parties.

5. What conditions must be satisfied to entitle a man to *Condictio Indebiti*? What do you suppose to be the basis of the rule excluding this right in the case of obligations the denial of which involves double liability?

6. What form was necessary in Justinian's time for the validity of codicils? What dispositions could a man make by will which he could not make by codicil? Did it make any difference whether the codicil was confirmed or not? If a will failed, might its provisions stand good as codicils? Discuss these questions from the view-points of different distinguished jurists in the time of Justinian.



7. 'It is not until the second century of our era that we find under the name of natural obligations various *de facto* situations to which were attached in default of an action, especially after Julian and Gaius, certain legal effects determined by criteria which were never made clear.' (*Declareuil.*) Discuss.

8. Write a short essay on one of the following topics :—

(a) Mistake as a factor in questions of Roman Law; (b) Juristic persons in Roman Law.

## PRIVATE INTERNATIONAL LAW

Examiner—THE HON'BLE MR. JUSTICE DWARKANATH MITTER,  
M.A., D.L.

*The figures in the margin indicate full marks*

1. Distinguish between domicile of origin and domicile of choice, and discuss this with special reference to the leading case of *Udny v. Udny*, L.R. 1 S.C. Appeal 441. 20

2. Is any testamentary disposition of movables which is recognised as valid by the law of the testator's domicile at the time of his death valid in England? Illustrate your answer by reference to leading cases on the subject. 20

3. Will an English Court give a remedy in the shape of damages in respect of an act which by the law of England imposes no liability upon the person from whom the damage is claimed? Illustrate your answer by referring to the facts in *Re 'The Halley'* L.R. 2 P.C. 133. 20

*Or,*

Is it a good defence to an action brought in an English Court on a judgment *in personam* of a foreign Court having jurisdiction over the parties and cause that the foreign tribunal has put a construction erroneous according to English law on an English contract? Refer to leading cases on the subject in support of your answer.

4. 'It is sometimes said that a foreign judgment is not enforceable in England if contrary to natural justice—that is to the natural sense of what is right and wrong.' (*Lord Esher. M.R.*) Develop this and refer to leading cases on the subject. 20

*Or,*

A person is born in Scotland of parents domiciled there, but not married till after his birth. He is regarded as legitimate by the Law of Scotland. After his father's death can he take as heir lands of his father situate in England? Illustrate your answer with reference to the facts of a leading case on the subject.

5. Discuss—

20

(a) the question of the right of a foreign Sovereign to Sue in an English Court;

(b) the question of the liability of a foreign-Sovereign to be sued in an English Court.

Refer to leading cases on the subject.

*Or,*

(a) State the circumstances under which English Courts will assume jurisdiction to dissolve a marriage not contracted in England.

- (b) Where the marriage has been celebrated in England, and the domicile of the parties is British, will the English Courts recognize a foreign divorce purporting to dissolve the marriage?

## TRANSFER OF PROPERTY

*Examiner*—THE HON'BLE MR. JUSTICE DWARKANATH MITTER,  
M.A., D.L.

*The figures in the margin indicate full marks*

1. Discuss the principle of 'Subrogation,' with special reference to leading English and Indian cases on the subject. 20
2. (a) Write a short essay on 'The extinction of a security by merger.' 20  
(b) 'The case of *Toulmin v. Steere* (3 Mer 210) has been encrusted with so many exceptions and qualifications that it may be said to be fairly buried in them.' Develop.  
*Or,*  
(a) Show, by an examination of Hindu law, that a security in the modern sense was a comparatively late development in Hindu Jurisprudence. 2  
(b) Trace the origin and development of the Bye-bil-wufa.
3. (a) Define an 'Easement'; analyse the several parts of the said definition. 20  
(b) Can inconsistent easements co-exist? Give reasons for your answer.  
(c) What do you understand by 'easements of necessity'? Give illustrations.  
*Or,*  
(a) State the nature of the right of support for a building on a person's land for the adjacent land of another, and discuss how it is acquired under (1) the English law, (2) the Indian law. 20  
(b) Formulate precisely the rights of a dominant tenement in respect of ancient lights. Refer to any leading cases on the subject that you can think of.
4. What is the reason of the rule that a purchase by a trustee for sale of property for which he is such a trustee is absolutely void? Under what circumstances can a trustee, other than a trustee for sale, buy trust property from his *cestui que trust*? Refer to leading Indian and English cases on the subject. 20
5. (a) Discuss the doctrine of *lis pendens* as embodied in the Transfer of Property Act. Refer to any leading cases on the subject that you may know. Does the doctrine apply to compulsory sales? 20  
(b) A property was sold subject to two mortgages. After the completion of the sale, the mortgages were declared invalid. Is the purchaser liable to account to the vendor for the amount of the mortgages as unpaid purchase money? Give reasons for your answer.

## PRINCIPLES OF EQUITY

Examiner—MR. H. D. BOSE, BÂR.-AT-LAW.

*The questions are of equal value*

[N.B.—You are requested to answer not more than FIVE questions. Please deal with such as you attempt EXHAUSTIVELY; and with special reference to IMPORTANT DECISIONS, BOTH ENGLISH AND INDIAN.]

1. Distinguish a mortgage from a sale with an option to repurchase, with special reference to the cases of (1) *Alderson v. White*; (2) *Bhagwan v. Bhagwan* (P.C.); and (3) *Balkishan Das v. Legge* (P.C.).
  2. Summarise the modern law of Precatory Trusts. Refer to (1) *Lamb v. Eames*; (2) *Mussorie Bank v. Raynor* (H.L.); and (3) *Coniskey v. Bowring Hanbury* (H.L.).
  3. Write a short and concise note on the—
    - (i) Equitable doctrine regarding Charitable Trusts;  
or,
    - (ii) Equitable Conversion.
  4. Discuss the doctrine of—
    - (i) Subrogation;  
or,
    - (ii) Satisfaction;  
or,
    - (iii) Election.
  5. Explain and illustrate :—  
'A Power must be exercised *bona fide* and for the end designed.'
  6. Discuss and examine the doctrine of Part Performance by reference to the facts and law, in—
    - (i) *Maddison v. Alderson*,
    - (ii) *Mahomed Musa v. Aghore Kumar Ganguly*,
    - (iii) *Lakshmi Venkayamma v. Venkata Narasimha Appa Row*,
 and (iv) *Gholam Hossain Casiff Ariff v. Jadunath Mozumdar*.
  7. Summarise—
    - (i) The doctrine of Consolidation of Mortgages;  
or,
    - (ii) Marshalling.
  8. Discuss and illustrate the principles governing the granting of Injunctions for infringement of right to—
    - (a) Copyright,
    - (b) Light and air,
 and (c) Support to buildings.
  9. State the facts of, and the principles enunciated in, any two of the following cases :—
    - (a) *Morice v. Bishop of Durham*.
    - (b) *Chaucey's Case*.
    - (c) *Allcard v. Skinner*.
    - (d) *Ackroyd v. Smithson*.
    - (e) *In re D'Angibau, Andrews v. Andrews*.
    - (f) *Stapilton v. Stapilton*.
    - (g) *Ryall v. Rowles*.
    - (h) *Kreqlinger v. New Patagonia Meat, etc., Co.*
    - (i) *Wallis v. Smith*.
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# Preliminary Examination in Law

## February, 1931

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### JURISPRUDENCE

*The questions are of equal value*

#### FIRST HALF

*Examiners—* { MR. SITARAM BANERJI, M.A., B.L.  
 „ SATYENDRAKISOR GHOSH, M.A., B.L.  
 „ GOPENDRAKRISHNA DUTT, M.A.,  
 BAR.-AT-LAW.

*Attempt ANY FIVE out of the following SEVEN questions*

1. What do you understand by 'Law'? What exactly is the nature of the 'Law' dealt with in Jurisprudence?
2. Write a short thesis on the right of the 'State' to impose 'laws' on its subjects.
3. "The importance of custom as a source of law continuously diminishes as the legal system grows." Explain and expand.
4. Define a 'right.' Would it be correct to say that "the State is the originator of rights, and that apart from it there are no rights?"
5. Distinguish and discuss 'substantive law' and 'adjective law.' Give examples.
6. Write a note on 'Juridical person.'  
Is the 'Corporation of Calcutta' a juridical person? Discuss.
7. Explain and discuss the relation of 'law' to 'Equity.'

#### SECOND HALF

*Examiners—* { MR. S. N. BHATTACHARYA, B.A., BAR.-AT-LAW.  
 „ M. N. MITTER, BAR.-AT-LAW.  
 DR. H. N. SANYAL, M.A., PH.D., BAR.-AT-LAW.

*Attempt ANY FIVE of the following*

1. Analyse the conception of (a) possession, and (b) ownership.
  2. Examine Savigny's analysis of a contract with reference to the English law of contract.
  3. "The Law of Nations is but private law writ large." Develop.
  4. "All property is founded on adverse possession ripened by prescription." Discuss.
  5. Write an essay on the 'Law of Nature.'
  6. "The penal law of ancient communities is not the law of crimes. It is the law of wrongs." Explain.
  7. "The movement of progressive societies has hitherto been a movement from status to contract." Discuss.
-

## ELEMENTS OF ROMAN LAW AND PRINCIPLES OF LEGISLATION

*Candidates shall give their answers in their own words  
as far as practicable*

*The figures in the margin indicate full marks*

*The questions are of equal value*

FIVE questions only to be attempted in EACH half

### FIRST HALF

*Examiners—* { MR. S. M. BOSE, M.A., LL.B., BAR-AT-LAW.  
DR. A. CHAUDHURI, B.A., LL.B., LL.D.,  
BAR.-AT-LAW.  
MR. JAJNESWAR, MAJUMDAR, M.A., M.L.

1. Give an account of the sources of law in the different periods of Roman history. 10
2. Explain the term *capitis deminutio*, and distinguish between the different kinds thereof. 10
3. Describe the various forms of marriage that prevailed in Rome. 10
4. Discuss the various Civil law modes of acquisition of property. 10
5. Give an account of the principal *Jura in re aliena*. 10
6. Write short notes on (a) *Emphyteusis*, and (b) *Ronorum Possessio*. 10
7. Explain and illustrate the fourfold classification of contracts in Roman Law. 10

### SECOND HALF

*Examiners—* { DR. SASANKAJIDAN RAY, M.A., D.L.  
MR. RUPENDRANARAYAN BAGCHI, M.A., M.L.  
,, A. K. HAJRA, M.A., BAR.-AT-LAW.

1. Illustrate the development of the *Lex Aquilia* by *utilis actio*. 10
2. State the conditions of liability under the *Lex Aquilia*. Does an action lie against a lunatic for causing damage? 10
3. X, who is a slave of A, is killed in a boxing contest with Y, who is a free citizen. Advise A as to his remedy, giving reasons. 10
4. X, who is a slave of A, is left as a legacy by him to B, who, however, accepts the legacy after X has been killed by Y. Has B any right of action against Y on the *Lex Aquilia*? 10
5. "The distinction between *Res Mancipi* and *Res Nec Mancipi* is the type of a class of distinctions to which civilisation is much indebted." Explain the above statement. 10
6. Explain the conception of *Usucapion* and state the special importance of it in connection with the law of property. 10
7. Write an essay on *Testamentary Succession*. 10

## HINDU LAW

*The figures in the margin indicate full marks*

## FIRST HALF

Examiners—{ MR. BIRAJMOHAN MAJUMDAR, M.A., B.L.  
 „ SUBODHCHANDRA SEN, M.A., B.L.  
 „ HARICHARAN GANGULI, M.A., B.L.

*Answer ANY FIVE questions*

1. State some of the principal points on which the Dayabhaga differs from the Mitakshara in its law of the Joint Family and its law of Inheritance. 10  
 Indicate the differences in principles on which these differences in the legal rules are based.
2. What is meant by the term "source" in the expression "sources of Hindu Law"? 10  
 What are at the present time the living and operating sources of Hindu Law?
3. Discuss the principles by which to determine what particular school of Hindu Law governs a particular Hindu. 10
4. Discuss the differences between the different schools of Hindu Law as to the widow's power to adopt in the Dattaka form. 10
5. Discuss the principle for determining whether a particular acquisition made by an individual member of a joint Hindu family is his separate property or is the property of the joint family. 10  
 Illustrate by referring to some leading cases.
6. Discuss shortly the liability of the son's share in a Mitakshara joint family property for debts incurred by the father. 10
7. Write an essay on the nature of the Hindu widow's estate in the property inherited from her husband. 10

## SECOND HALF

Examiners—{ MR. BATUKNATH BHATTACHARYYA, M.A., B.L.  
 „ SANATKUMAR CHATTERJEE, M.A., B.L.  
 „ DHIRENDRAKRISHNA RAY, B.L.

*Answer ANY FIVE questions*

1. "An 'idol' is a juridical person." 10  
 State and discuss some of the legal results which follow from this idea.
2. A Hindu, head of a Mitakshara joint family, dies leaving a widow, a son, a grandson by the said son, two grandsons by a predeceased son, a widow of another predeceased son, and an unmarried daughter. 10  
 How on a partition is the property divided?  
 Compare and contrast this partition with that of the early Roman Law, had the deceased been the *pater familias*.
3. A Hindu, governed by Dayabhaga, dies leaving the following relations:— 10  
 (a) daughter's grandson,  
 (b) brother's daughter's son.  
 (c) brother's great grandson.

Who, if any, is his heir? Deduce your answer from the principle of the Dayabhaga law of inheritance as expounded in the case of *Gooroo Gobind Shaha v. Anund Lall Ghose*, 5 B.L.R., 15.

4. State the difference in the concept of Stridhan as expounded by Vijnaneswara and Jimutavahana, respectively. 10

Examine how far this difference has been obliterated by judicial decisions.

5. Mention and summarise any one instance of legislative enactment in British India modifying or affecting Hindu Law.

Are you in favour of, or opposed to, the enactment? Give reasons.

6. Argue the case of *Sri Balusu Gurulingaswami v. Sri Balusu Ramalakshamma*, L.R. 26, I.A. 115, against the view of the Privy Council that the adoption of an only son having taken place in fact is not null and void under the Hindu Law. 10

7. Give a summary of the facts, arguments, and decision of any one of the following cases:— 10

(a) *Bhuban Moyee v. Ramkishore*, 10 M.I.A. 279.

(b) *Rangasami Gonuden v. Nachiappa Gonuden*, L.R. 46, I.A. 72.

(c) *Debi Prosad v. Golap Bhagat*, I.L.R. 40 Cal., 721 F.B.

## CONSTITUTIONAL LAW

*The questions are of equal value*

N.B.—Candidates will answer TEN questions in all; FIVE from the First Half and FIVE from the Second Half

### FIRST HALF

Examiners— { MR. P. N. BANERJEE, M.A., B.L., BAR.-AT-LAW.  
" A. S. M. LATIFUR RAHMAN, B.A., LL.B.,  
BAR.-AT-LAW.  
DR. J. N. MAJUMDAR, M.A., PH.D., BAR.-AT-LAW.

1. "British Indian Legislatures are non-sovereign or sub-ordinate law-making bodies without being constituent, and Courts may declare Acts of the Indian legislation, Supreme or Provincial, as ultra vires." (*Sarvadhicari*.) Discuss.

2. "English Constitutional Law is really part of private law." (*Sarvadhicari*.) Explain.

3. Write notes on any four of the following:—

(a) Acts of State, (b) Impeachment, (c) Mandatory territories, (d) The Act of Settlement, (e) Parliament Act 1911, (f) The Riot Act (1 Geo. Ist 2 C. 5.)

4. How is the right to personal freedom secured in England?

5. Explain what is meant by the doctrine of Ministerial Responsibility in England.

6. Discuss the principles of law laid down in

*Either,*

*Empress v. Bura Singh*, 59 A. 178.

*Or,*

*Ex parte D. F. Marais* (1902) A.C. 109.

7. Answer *any two* of the following questions with reference to leading cases wherever possible :—

(a) Can the Crown acquire lands belonging to a subject in England without payment of compensation? If so, under what circumstances?

(b) Can the Crown by the exercise of prerogative levy taxation on the subject in (i) England, (ii) India?

(c) Can the governor of a Crown colony be tried in the Courts of the colony under his charge?

(d) Do the judges in (i) England, (ii) India, enjoy immunity in regard to acts or omissions in the exercise of their judicial capacity?

8. Explain *any two* of the following maxims :—

(a) The king can do no wrong.

(b) "Nullum Tempus Occurrit Regi," i.e., No time runs against the king.

(c) The king never dies.

(d) The Crown is the symbol of the unity of the British Empire.

## SECOND HALF

Examiners— { MR. HIRALAL CHAKRABARTI, M.A., B.L.  
 „ SURESCHANDRA GHOSH, M.A., B.L.,  
 BAR-AT-LAW.  
 „ SOMESWARPRASAD MUKHERJEE, M.A., B.L.

1. "The Dominion Parliament is a non-sovereign legislative body and bears decisive marks of legislative subordination." Discuss.

2. "Federalism means legalism." "Federalism substitutes litigation for legislation." Explain.

3. What is the sanction by which the conventions of the British Constitution are enforced?

4. State the exceptions to the rule that all men are equal before the law.

5. Distinguish between public, private, and money bills. What is the constitutional position with regard to money bills?

6. "Behind Parliamentary responsibility of the Ministers lies legal liability."

How far is it true of the conditions now existing in England?

7. Would you insist on a Declaration of Rights in the future Indian Constitution.



July, 1931

## JURISPRUDENCE

*The questions are of equal value*

*FIVE questions only are to be answered in EACH half*

### FIRST HALF

Examiners— { DR. S. K. GUPTA, M.A., B.L., B.LITT., PH.D.,  
BAR.-AT-LAW.  
MR. M. N. MITTER, M.A., B.L., BAR.-AT-LAW.  
,, S. K. DATTA, BAR.-AT-LAW.

1. "Jurisprudence, as a science of civil law, is divisible into three branches which may be distinguished as *analytical*, *historical*, and *critical*." Explain.

How far can you accept the opinion of Holland, that jurisprudence cannot properly be described as historical or philosophical?

2. "Law has been for centuries described as a command, but this description though essentially true is inadequate to the extent of being misleading." Discuss.

3. What do you mean by the expression "source of law"? Write a short note on Legislation as an instrument of law making.

4. How do you define "Person" in jurisprudence? What are *artificial persons*? Is the personality in a corporation real or fictitious?

5. Analyse the conception of a '*legal right*.' How do you distinguish legal right from (a) privilege, and (b) power?

Can you conceive of any imperfect legal right which is recognised but not enforced by law?

6. Give a short account of Savigny's theory of Possession. How far has this theory been accepted in English Common Law? Why are possessory rights protected by law?

7. Explain the principle on which a '*negotiorum gestor*' was entitled to compensation under Roman Law. What is the rule of English Law on the point?

### SECOND HALF

Examiners— { MR. S. N. BHATTACHARYYA, B.A., BAR.-AT-LAW.  
,, A. K. DEB, BAR.-AT-LAW.  
,, RAMESCHANDRA PAL, M.A., M.L.

1. What are *accessory contracts*? Write a short note on the law of suretyship.

2. Explain the various ways by which an antecedent right in *personam* can be transferred.

3. What do you mean by *Constitutional Law*? What is its relation with *Administrative Law*? Explain.

4. "International law is private law writ large." Explain.

5. "The conception of a will or testament cannot be considered by itself. It is a member, and not the first of a series of conceptions." Explain.

6. 'Occupancy was the process by which 'no man's goods' of the primitive world became the private property of individuals in the world of history.' Discuss.

7. "The more archaic the code, the fuller and the minuter is its penal legislation." Explain.

## ELEMENTS OF ROMAN LAW AND PRINCIPLES OF LEGISLATION

*Candidates shall give their answers in their own words as far as practicable*

*The figures in the margin indicate full marks*

*Five questions only to be attempted in EACH half*

### FIRST HALF

**Examiners—** { DR. ASWINI CHAUDHURI, B.A., LL.B., LL.D.,  
BAR.-AT-LAW.  
MR. JAJNESWAR MAJUMDAR, M.A., M.L.  
,, A. K. HAJRA, BAR.-AT-LAW.

1. What do you know of the Twelve Tables? State some of the more important provisions thereof. 10
2. Discuss the legal position of the *filii familias* in respect of his person and proprietary capacity. 10
3. State the process of adoption and the legal effects thereof. 10
4. Discuss the natural or original modes of acquisition of property. 10
5. Define Servitude; and explain the various kinds of *praedial servitudes*. 10
6. Write short notes on (a) *Hypothec*, and (b) *Societas partnership*. 10
7. State the rules regarding *testamentifactio*. 10

### SECOND HALF

**Examiners—** { DR. SASANKAJIBAN RAY, M.A., D.L.  
MR. ANILENDRANATH RAYCHAUDHURI, M.A., B.L.  
,, PANCHANAN GHOSH, M.A., B.L.

1. Give an account of the *Lex Aquilia* concerning *damnum injuria datum*. 10
2. What are the provisions of the *Lex Aquilia* in case of an instructor wounding a slave whom he is teaching? 10
3. Discuss the measure of damages payable under the *Lex Aquilia* for the unlawful slaying of *quadrupedem vel pecudem*. 10
4. X, who has given his horse as a pledge to Y, kills it through negligence. Has Y any remedy against X? 10
5. Write an essay on *Jus Naturale*. 10
6. Explain the importance of *nexum* in the development of the law of contract. 10
7. "The Penal Law of ancient communities is not the Law of Crimes, it is the Law of Wrongs or of Torts." Explain. 10

## HINDU LAW

The figures in the margin indicate full marks

## FIRST HALF

Examiners— { M. JYOTIPRASAD SARBADHIKARI, M.A., B.L.  
 „ MR. HARIOCHARAN GANGULI, M.A., B.L.  
 „ GAURMOHAN DUTT, B.L.

FIVE questions only to be attempted, but your choice must include Nos. 7 and 8.

1. Enumerate the rules of prohibited degrees in marriages as prevalent in the Bengal school. 10
2. Explain the doctrine of *Factum valet*. Illustrate your answer from the law of marriage. 10
3. Discuss the eligibility of an only son for adoption. 10
4. What is the juristic position of a shebait of a religious endowment? Define his powers in reference to sales and leases of endowed property. 10
5. Explain the principles laid down in the case of *Bajinath v. Tej Bali*, L.R. 48 I.A. 195. 10
6. Write a short note on 'Antecedent debts.' 10
7. A, a Hindu governed by the Bengal school, dies without issue, leaving him surviving his widow  $W_1$ , and his two full brothers, B and C. The widow  $W_1$  succeeded to his estate and lived up to the year 1900. B and C both predeceased the widow  $W_1$ , B leaving a son  $S_1$  and C a childless widow  $W_2$ . C gave his widow  $W_2$  power to adopt a son.  $S_1$  and  $W_2$  survived the widow  $W_1$ . In 1902,  $W_2$  adopted  $S_2$ . There is a dispute between  $S_1$  and  $S_2$  relating to the estate of A. What is your opinion regarding their claims? 10
8. A, a Hindu governed by the Mitakshara school, inherited considerable properties from his father, but had no self-acquired property. He had three sons, B, C, and D. He sent his eldest son B to England where B studied for five years and ultimately became a member of the Indian Covenanted Service. B rose to a high official position and by reason of his thrift saved a good part of his salary and purchased from his savings some immovable properties to which his brothers C and D laid claim on the death of their father A. Is the claim of C and D justified, and, if so, on what principle? 10

## SECOND HALF

Examiners— { MR. SANATKUMAR CHATTERJEE, M.A., B.L.  
 „ SANTOSHKUMAR PAL, M.A., B.L.  
 „ NARAYANCHANDRA KAR, B.L.

1. What is the conception of *Daya* according to (a) Vijñaneswara, (b) Jimutavahana? 10

Or,

"On the demise of both parents, participation among the brothers is allowed, and even when they are both living it is right if the mother be past child-bearing." (*Vrihaspati*.)

How does Jimutavahana reconcile this text with his idea of heritage?

2. What are the requisites of a valid surrender by a Hindu widow of her estate in favour of the presumptive reversioner? Illustrate your answer by reference to any leading case. 10

Or,

A married woman gets immovable property from (a) her father, (b) her husband by—

(i) inheritance, (ii) gift.

What are her rights over the same?

3. Explain the rule laid down in the case of *Buddha Singh v. Lattu Singh*, L.R. 42 I.A. 208. 10

Or,

State the facts of, and the principles formulated in, the case of *Suraj Bangsi Koer v. Sheo Prasad*, L.R. 6 I.A. 88.

4. A, a Hindu governed by the Bengal school, dies leaving two items of immovable property, X and Y, of almost equal value. His childless widow W succeeds to the same. His only relation who survives him in his brother B. W makes a gift of X only to her brother and retains Y till her death. This gift is with the consent of B. B dies during the life-time of W, leaving a son C, who survives the widow, and after her death impeaches the gift. Discuss the rights of C and of the donee. 10

5. A, a Hindu widow, inherited from her husband vast properties. She saves the income and purchases immoveable properties from such savings. The incomes of the properties inherited from her husband and of those purchased by her as aforesaid are entered promiscuously and in the same books kept by her, and it is not possible to distinguish them. She dies intestate. On her death, her husband's reversioner and her own stridhan heir both lay claim to the properties which she possessed at her death, that is to say, the properties she inherited from her husband and those purchased by her. 10

You are asked to settle the dispute in accordance with law. What would you do? Support your answer with reason.

## CONSTITUTIONAL LAW

*The questions are of equal value*

Candidates will answer TEN questions in all; FIVE from the first half and FIVE from the second half. Credit will be given for reference to decided cases.

### FIRST HALF

Examiners— { MR. S. C. CHAUDHURI, M.A., LL.B., LL.D.,  
BAR.-AT-LAW.  
,, SRIPATI RAY, M.A., B.L.  
,, KAMALABHUSHAN BOSE, BAR.-AT-LAW.

1. Explain what is meant by "Parliamentary privileges." Enumerate the more important amongst them.

2. Distinguish between sovereign and non-sovereign legislative bodies. Can the Courts in British India declare Acts of the Indian legislature *ultra vires*? If so, to what extent?

3. "English constitutional law has been evolved out of, and is therefore, a part and parcel of the private law or general law of the land." (*Sarvadhicari*). Discuss.

4. Comment on any *two* of the following :—

(a) "The common pleas shall not follow the King's Court but must be held in a fixed spot." (*Magna Charta*.)

(b) "The raising or keeping a standing army within the kingdom in time of peace, unless it be with the consent of Parliament, is against law." (*Bill of Rights*.)

(c) "No pardon under the Great Seal is to be a bar to impeachment by the Commons in England." (*The Act of Settlement*.)

5. "The conventions of the constitution in England depend ultimately on the laws of the land." Illustrate.

6. What is the effect of the issue of the writ of Habeas Corpus? Can the High Courts in India issue the writ?

## 7. Discuss the principles of law involved in—

*Either,*

*The seven Bishop's case*, 12 St., tr. 183.

*Or,*

*Ex parte D. F. Marais* (1902) A.C. 109.

## SECOND HALF

Examiners— { MR. P. N. BANERJEE, M.A., B.L., BAR.-AT-LAW.  
 { .. A. S. M. LATIFUR RAHMAN, B.A., LL.B.,  
 { BAR.-AT-LAW.  
 { .. DWIJENDRACHANDRA GHOSH, BAR.-AT-LAW.

8. Write notes on any *two* of the following :—

(a) Acts of State.

(b) The Civil List.

(c) Prorogation of Parliament.

(d) The Committee of Privileges in the Lords.

## 9. Discuss the principles of law laid down in—

*Either,*

*Empress v. Burah Singh*, 59 A 178.

*Or,*

*Spooner v. Juddo*, 4 M.I.A., 353.

10. How far are the Courts the guardians of the constitution in (i) the U.S.A., (ii) England, (iii) India?

11. "Theoretically, supremacy of law is as much a cardinal principle of the constitution in India as in England. Barring a few exceptions there is the same equality of all before the law." (*Sarradhicari*.) Explain. Enumerate some of these exceptions.

12. Explain Naturalisation and Domicil. How can they be acquired in England? Can a person have two domicils at the same time?

13. Write a note on the Indian law of Sedition.

14. Enumerate the constitutional checks on the exercise of prerogative by the Executive in England.

15. Note the points of difference between jury trial in England and in India respectively.

# Intermediate Examination in Law, February, 1931

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## MAHOMEDAN AND PERSONAL LAW

*The questions are of equal value*

### FIRST HALF

*Examiners—* { Mr. S. KHUDA BUX, M.A., B.C.L.,  
BARRISTER-AT-LAW.  
,, AHMEDALI KHAN, M.A.,  
BARRISTER-AT-LAW.

1. Discuss the position of the Hanifah as a jurist. State the sources of Muslim Law.

2. Is delivery of possession essential to the validity of a gift under the Muslim Law? Discuss fully the Law on the subject.  
Give instances of gifts with conditions.

3. Discuss the principles laid down in the case of *Awl Fata Mohamed v. Rasomaya Dhar*.

Or,

State the principles regarding exclusion from inheritance.

4. What are the formalities necessary for making a Mohamedan will? Can a bequest be made in favour of an heir?

Or,

Discuss the principles of Muslim Law laid down in *Khajooroonissa v. Rowshan Jehan*.

5. What are the three classes of heirs recognised by the Sanni school of Muslim Law? In what order do these classes inherit?

### SECOND HALF

*Examiners—* { Mr. NURUL HAQ CHAUDHURY, M.A., B.L.  
,, R. C. GHOSH, M.A., B.L.,  
BARRISTER-AT-LAW.

1. What is a writ of Habeas Corpus? What are the statutes that have secured to Englishmen their right of personal liberty?

Or,

The king can do no wrong. Protection and subjection are reciprocal. Explain.

2. State briefly the privileges and incapacities of minors. Is a contract entered into by a minor void or voidable?

3. How are aliens naturalized in England? Discuss the law on the subject.

4. Discuss how far the English Common Law doctrine, that the servant undertakes the risks incident to the service, including those arising from the negligence of a fellow-servant, has been modified by legislature.

Or,

Indicate briefly the conditions under which a master may become liable to third persons for the tortious act of a servant.

5. State the method in which the English Law provides maintenance for an illegitimate child during its infancy.

## TRANSFER OF PROPERTY

*The questions are of equal value*

### FIRST HALF

Examiners— { MR. RAMAPRASAD MOOKERJEE, M.A., B.L.  
 „ PASUPATINATH GHOSH, M.A., B.L.

*Answer any FIVE of the following*

1. What are the essentials of a valid attestation under the Transfer of Property Act?

A person executes a mortgage deed which is properly attested by only one witness. The executant, however, later on acknowledges his execution before the Sub-Registrar and the Sub-Registrar in due course signs his name on the instrument in the presence of the mortgagor. Is the deed properly attested?

2. What is meant by *notice* under the Transfer of Property Act?

Write a short note on the doctrine of constructive notice, incidentally discussing the question whether registration of a document is constructive notice of the transaction evidenced by it.

3. Write a brief note on the doctrine of *lis pendens*.

Does the doctrine of *lis pendens* apply in the following cases?—

(a) A brings a suit against B for the establishment of his title to a property X. During the pendency of the suit, the property X is sold in execution of a decree against B; after that A gets a decree.

(b) A brings a suit for money against B and attaches his property X before judgment. During the pendency of the suit the property X is sold in execution of another decree against B. A wins his suit and gets an order for sale of the attached property.

4. Are there any limitations on the power to transfer future or possible interests in property under the Transfer of Property Act?

5. What are the various kinds of mortgage recognised by the Transfer of Property Act?

Distinguish between an English mortgage and a mortgage by conditional Sale.

6. How can a sale of immovable property be validly effected under the Transfer of Property Act?

7. Formulate the principles of law laid down in *Lala Hakimlal v. Musahar*, I.L.R. 34 Cal. 999.

## SECOND HALF

*Examiners*— { Mr. GOPENDRANATH DAS, M.A., B.L.  
 „ DERENDRANATH MANDAL, M.A., B.L.

*Answer any FIVE of the following*

1. A executes and registers a deed of sale transferring land to B, and delivery of possession is given to B; but the price stipulated is not paid. Is the sale complete?

2. Can a mortgagee sue the mortgagor for the mortgage money otherwise than by way of foreclosure or sale of the mortgaged property under any circumstances?

3. What is meant by the doctrine of part performance? Under what circumstances can a transferee under an informal transfer claim the benefit of the doctrine of part performance under the present law?

4. What is the general principle of marshalling as laid down in the Transfer of Property Act?

Can the purchaser of a portion of the mortgaged property claim a right to marshal?

5. Discuss the principles laid down in *Gurdeo Singh v Chandrika*, I.L.R. 36 Cal. 193.

6. Do the following documents require to be registered?—

(a) An agreement to sell immovable property by payment of Rs. 1,000 by way of earnest money.

(b) Authority to adopt when conferred by a non-testamentary instrument.

(c) Adoption deed.

7. Where property is mortgaged and the mortgagee is placed in possession of the property, is the mortgagee entitled on redemption to any of the following accessions?—

(a) A lease which expired and was renewed by the mortgagee in his own name.

(b) Where the mortgaged property is land and buildings to any new structures erected by the mortgagee.

## REAL PROPERTY AND SUCCESSION

*The figures in the margin indicate full marks*

## FIRST HALF

*Examiners*— { DR. S. C. CHAUDHURI, M.A., LL.B., LL.D.,  
 BAR.-AT-LAW.  
 MR. D. N. MITTER, M.A., LL.B.,  
 BAR.-AT-LAW.

*Answer any FIVE of the following questions*

1. Explain any two of the following terms :—

(a) Estate tail, (b) Springing use, (c) Chattel Real, (d) Equitable mortgage.



2. What is the distinction in English law between property in land and property in goods? 10

How do you distinguish between real and personal actions?

3. State clearly the rule against perpetuities. What are the exceptions to this rule? 10

4. Distinguish between joint tenancy and tenancy-in-common. How can a joint tenant effect partition? 10

5. Explain: A contingent remainder must vest during the particular estate or *eo instanti* that it determines. Explain and illustrate the difference between a contingent remainder and an executory devise. 10

6. An executor derives his power from the will and an administrator from the grant of the letters of administration. 10

Explain this rule and show the chief practical consequences which result therefrom.

7. State the facts and explain the principles involved in the case of:— 10

(a) *London S. W. Ry. Co. v. Gorum*, L.R. 20 Ch. D. 562.

Or,

(b) *Van Grutten v. Forswell*, 1897 A.C. 658.

## SECOND HALF

Examiners— { MR. S. B. SINHA, M.A., B.L., BAR.-AT-LAW.  
,, HARADHAN CHATTERJEE, M.A., B.L.

*Not more than FIVE questions are to be attempted*

1. Explain any two of the following terms— 10

(a) Election, (b) Ademption of legacies, (c) Executor de son tort, (d) Administration de bonis non.

2. What do you understand by domicile of origin? What are the facts by which domicile is determined? 10

3. A testator at the commencement of the will gives his house to A, and at the end of the will directs that his house shall be sold and the proceeds shall be invested for the benefit of B. Which disposition shall prevail? Give reasons for your answer. 10

4. What do you understand by "unprivileged will"? How can a will be revoked? 10

5. Can a legatee under a will executed by a Mahomedan sue the executor for legacy bequeathed to him without taking out the probate? 10

6. Can you supply or reject words in a will? What are the guiding rules in this respect? 10

7. State the facts and explain the principle involved in the case of *Bai Moti Vahu v. Bai Manubai*, I.L.R. 21 Bom. 709. 10

Or,

*Narendra v. Kamal Basini*, I.L.R. 23 Cal. 563.

## CONTRACTS AND TORTS

*The figures in the margin indicate full marks*

## FIRST HALF

Examiners—{ Mr. MAHIMAMUKUL HAZRA, M.A., B.L.  
 ,, AMARENDRABHUSHAN GHOSH, M.A., B.L.

*Only FIVE questions are to be attempted*

1. (a) State the essential elements of a valid contract under the Indian Contract Act, and illustrate what is understood by a voidable contract. 7
- (b) A, for natural love and affection, promises to give B, one of his sons, Rs. 10,000. A dies before he fulfils his promise. Has B any right to recover the money? Give reasons for your answer. 3
2. (a) Discuss the contractual liability of minors in English and in Indian law. 7
- (b) A minor hired a horse and contracted expressly that he would not use it for jumping. A friend of his jumped the horse and killed it. Can the minor be made liable in any way in English law? Give reasons for your answer. 3
3. (a) Distinguish between a condition and a warranty in a contract; and discuss briefly the meaning and nature of a quasi-contract. 7
- (b) A, a tradesman, leaves a certain article at B's house by mistake. B treats the article as his own by mistake. What is B's liability? Give reasons for your answer. 3
4. (a) Discuss the elements of fraud as a vitiating element in contracts. Mention the circumstances under which *silence* amounts to fraud (i) in ordinary contracts, and (ii) in contracts *uberrimae fidei*. 7
- (b) A and B, being traders, enter upon a contract. A has private information of a change in prices which would affect B's willingness to proceed with the contract. A does not inform B of the change. Is the contract valid? Give reasons for your answer. 3
5. (a) Illustrate the exceptions to the rule, "No seller" can give to the buyer of goods a better title to those "goods than he has himself." 7
- (b) A bought goods of B, representing himself to be C, and then sold and delivered the goods to D. Can B recover from A or D? Give reasons for your answer. 3
6. (a) How far, if at all, can a person acquire rights or incur liabilities under a contract to which he is not a party? 7
- (b) A, who owes B Rs. 100, makes over the amount to C to be paid to B. C misappropriates the sum. Can B sue C for the money? Give reasons for your answer. 3
7. (a) How is an agency terminated? How far is a principal liable under a contract in which the agent commits fraud for his own benefit, though acting within his authority? 7
- (b) A, being B's agent for the sale of goods, induces C to buy them by a misrepresentation, which he was not authorized by B to make. Discuss the liability of B to C. 3
8. Explain the principle laid down in one of the two following cases :— 10
- (a) *Smith v. Hughes* (L. R. 6 Q.B., 597).
- (b) *Hadley v. Baxendale* (9 Exch., 341).

## SECOND HALF

Examiners—{ Mr. JYOTIPRASAD SARBADHIKARI, M.A., B.L.  
 ,, M. A. ISPAHANI, M.A., BAR.-AT-LAW.

Only FIVE questions are to be attempted

1. Define a tort, and distinguish it from a breach of contract and a crime. Can the same act be a tort, a breach of contract, and a crime? Illustrate. 10
  2. Enumerate briefly the conditions excluding liability for acts, *prima facie* wrongful, and explain and illustrate "*Volenti non fit injuria*." 10
  3. (a) Explain and illustrate :— 7  
*Damnum sine injuria* and *Injuria sine damno*.
  - (b) In an action for Trespass, trespass is proved in fact. Can it be urged in defence that the plaintiff's possession was wrongful? Give reasons for your answer. 8
  4. (a) When is a master liable for the wrongful act of his servant, and how far are bodies corporate liable in tort for acts of their agents or servants? 7
  - (b) A, who is carrying B (a child of tender years) in her arms, is run over by a car driven rashly by K. A and B are injured. If A had been careful, the accident would have been avoided. Discuss the rights of A and B against K. 8
  5. Mention the principal differences between Libel and Slander. How far is "fair comment" a sufficient defence in an action for Libel? 10
  6. (a) Explain "negligence," and discuss the doctrine of "contributory negligence." 8
  - (b) The driver of a cart negligently left the car in custody of a lad whose duty it was to go with the cart to deliver parcels, but he had been forbidden to drive. The lad drove the cart and it collided with A's carriage. Is the employer of the driver liable? 2
  7. Is a person liable in tort for inducing another to break a contract? Discuss. 10
  8. Discuss the rule in *Rylands v. Fletcher*, and state the exception to that rule. 10
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July, 1931

## MAHOMEDAN AND PERSONAL LAW

*The questions are of equal value*

### FIRST HALF

Examiners—{ Mr. AHMED ALI KHAN, M.A., BAR.-AT-LAW.  
 ,, WAHED HOSSAIN, M.A., B.L.  
 ,, S. KHUDA BUX, M.A., B.C.L., BAR.-AT-LAW.

1. What essential formalities must a pre-emptor perform before he can claim pre-emption?

2. What are the several modes of revocation of will under the Mohamedan Law? Give an example of each.

*Or,*

Who are the residuaries according to the Hanafite school?

3. What are the sources of Mohamedan Law? What traces of foreign influence, if any, do you find in Muslim Law?

4. Discuss the Mohamedan Law of Dower.

*Or,*

How far has Act XXI of 1850 affected the Mohamedan Law as to exclusion from inheritance?

5. What are the essentials of a gift according to the Mohamedan Law?

### SECOND HALF

Examiners—{ SIR ABDULLA SUHRAWARDY, KT., M.A., PH.D.,  
 D.LITT., BAR.-AT-LAW, M.L.A.  
 MR. AZIZ RAHIM, BAR.-AT-LAW.

1. Distinguish between natural allegiance and local allegiance. Explain the maxim: "*The king never dies.*"

2. State concisely the powers and duties of a guardian of the property of a minor appointed by Court.

3. What is meant by the "Prerogative of the Crown"? Discuss the subject.

*Or,*

What is the Age of Majority in India?

4. Explain the maxims: "*King can do no harm*" and "*In him there can be no negligence or laches.*"

*Or,*

Discuss historically the right of Personal Liberty of the subject and its limitations.

5. Has the Court any jurisdiction to remove parents from the guardianship of their children? Name some of the circumstances under which the Court can interfere.

## TRANSFER OF PROPERTY

*The figures in the margin indicate full marks*

## FIRST HALF

Examiners— { MR. BIRAJMOHAN MAJUMDAR, M.A., B.L.  
 ,, MAHIMAMUKUL HAJRA, M.A., B.L.

*Answer any FIVE of the following*

1. State the rule of law against perpetuities as applied to transfer *inter vivos* in favour of an individual. 10

The owner of a zemindari covenanted with A that if he (the zemindar) or any of his successors in interest should fail to maintain A or his descendants at any time, then the latter were to have immediate right to a certain village in the zemindari. Is a claim by a descendant of A to the village on the ground that the zemindar had refused to maintain him sustainable? Give reasons for your answer.

2. Distinguish between a vested and a contingent interest in property. Give an instance of a person obtaining, by a transfer, a vested interest in a property without being entitled to the present enjoyment thereof. 10

Property is transferred to A for life and after his death to B. B dies during the life time of A. How would the property devolve on the death of A? Give reasons for your answer.

3. State the circumstances in and the extent to which a transfer of property is affected by reason of its being made during the pendency of litigation relating to the property. What is the reason of the rule of law? 10

4. Define English mortgage, mortgage by conditional sale. What is meant by the right to redeem a mortgage? 10

When is a person said to have a charge on a property? Distinguish between a simple mortgage and a charge.

5. What is a sale? Distinguish between a sale and a contract for sale. 10

How can a sale of immovable property be made? What ordinarily, are the rights of the purchaser regarding documents of title relating to the property sold, and the rights of the vendor in respect of any part of the purchase money remaining unpaid after the ownership of the property has passed to the purchaser?

6. A is the owner of a fishery; B is the holder of a leasehold interest in a hotel. B borrows money from A on the mortgage of his leasehold interest in the hotel, it being stipulated in the instrument of mortgage that throughout the term of his lease, whether the mortgage has been satisfied or not, all the fish consumed in the hotel should be purchased from A. B pays off the mortgage debt in full with interest and costs before the expiry of the term of his lease. Does the stipulation about the purchase of fish continue? State reasons and authority for your answer. 10

7. A is the owner of a zemindari under which there are certain undertenures. A gives a usufructuary mortgage of the zemindari to B who is put in possession of the zemindari. During the continuance of the mortgage, B buys some of the undertenures. What are the rights of A in respect of the undertenures purchased by B? State reasons and authority for your answer. 10

8. A, a Hindu, died leaving property X, a widow W who was his heir, and a brother B who was the presumptive reversionary heir. During the life time of W, B representing that he was the owner of it, sold X to C who obtained possession. After the death of W and when C was in actual possession of X, B sold it to D. Discuss the question of the rights of C and D respectively to the property. 10

## SECOND HALF

Examiners— { MR. MANINDRANATH GHOSH, M.A., B.L.,  
BAR.-AT-LAW.  
,, SURESHCHANDRA DAS, M.A., B.L.

*Answer any FIVE of the following but ONE must be either Question 6 or Question 7.*

1. What is meant by subrogation? Explain briefly by whom and in what circumstances a right of subrogation can be claimed in respect of a mortgage. 10

2. What are the rights of the mortgagee where the mortgaged property is sold owing to failure to pay arrears of revenue or rent, or where it is compulsorily acquired for a public purpose? 10

• State what is meant by the marshalling of securities, explaining the circumstances in which such marshalling can be claimed.

3. What is a lease? How can leases be made? How does a lease come to an end? 10

A lease from year to year commenced with the 1st day of January. The lessee has not received before the 1st July, 1930, any notice to quit. Up to what date is the lessee secure from being ejected by notice, there being no special contract, local law or usage affecting the case?

4. What is a gift? When does a gift of immovable property become complete? How can a gift of immovable property be made? In what cases may a gift be suspended or revoked? 10

5. (a) What is an actionable claim? How are actionable claims transferred? 5

(b) What is the effect of non-registration of a document which is required to be registered? 5

6. How does the Registration Act affect transactions which may be validly effected without any instrument in writing? 10

What advantages, if any, does a person secure in respect of his rights under a document by obtaining registration thereof in a case where the document is not one which is required to be registered?

7. What are the documents which are required by the Indian Registration Act to be registered? 10

A memorandum of agreement witnesses that A has contracted to sell to B a house for Rs. 10,000 and has received from B Rs. 1,000 as earnest money. Is the memorandum a document which is required to be registered? Are you aware of any recent legislation on this question?

# INTERMEDIATE EXAMINATION IN LAW

## REAL PROPERTY AND SUCCESSION

*The figures in the margin indicate full marks*

### FIRST HALF

*Examiners*— { MR. D. N. MITTER, B.Sc., LL.B.,  
BAR.-AT-LAW.  
,, RAMENDRAMOHAN MAJUMDAR, M.A., B.L.

*Answer any FIVE questions*

1. What is the distinction in English between property in land and property in goods? Is real property synonymous with immovable property? 10
  2. Explain: "Primogeniture, as it obtains among the landed gentry of England, is a custom only, and not a right." 10
  3. Explain any *two* of the following terms:— 10
    - (a) Personal actions.
    - (b) Contingent remainder.
    - (c) Springing use.
    - (d) Merger.
  4. What is a base fee? Discuss the rights of a tenant for life. 10
  5. State clearly the rule against perpetuity. What are exceptions to this rule? 10
  6. What is a clog on the equity of redemption? Discuss the validity of these provisions in a deed of mortgage:— 10
    - (a) That the mortgage shall not be paid off for a period of seven years.
    - (b) That during the continuance of the mortgage, whether any money should or should not be owing on the security, the mortgagor is bound not to sell in the house any malt liquors except those purchased from the mortgagee.
  7. State the facts and the principles laid down in the case of— 10
    - (a) *Van Grutten v. Forswell* (1897) A.C. 658.
- Or,**
- (b) *London and South Western Railway Co. v. Gorun*, 20 Ch. D. 562.

### SECOND HALF

*Examiners*— { MR. KUMUDBIHARI BOSE, M.A., B.L.,  
BAR.-AT-LAW.  
,, AMBUJNATH BANERJEE, M.A., B.L.

*Answer any FIVE questions*

1. Explain any *two* of the following terms:— 10
  - (a) Ademption of legacies, (b) Administration de bonis non,
  - (c) Codicil, (d) Executor de son tort.
2. What is meant by domicile of origin? How does domicile affect succession to one's properties? 10
3. What is donatio mortis causa? Explain the law in regard to donatio mortis causa. 10

4. What do you understand by an unprivileged will? How may an unprivileged will be revoked? 10
5. Examine the effect of the following bequests :— 10
  - (a) A legacy to the youngest son of B, B has no son at the time of the death of the testator.
  - (b) A bequest to A or B.
6. What is "just cause" for revocation of grant of probate? 10
7. State the facts and the principles laid down in the case of— 10
  - (a) *Narendranath Sircar v. Kamalbasini Dasi*, I.L.R. 23 Cal. 563.

Or,

- (b) *Sailajaprosad Chatterji and others v. Jadunath Bose*, 21 C.L.J. 88.

## CONTRACTS AND TORTS

*The questions are of equal value*

- *Candidates are required to answer any FIVE questions from EACH half.*

### FIRST HALF

*Examiners*— { *MR. RAMAPRASAD MOOKERJEE, M.A., B.L.*  
 ,, *KSHETRAMOHAN GHOSH, B.L.*

1. What are the points of difference in English Law between a simple contract and a contract under seal? Do the English Law and Indian Law differ in this respect?

2. Discuss with reference to case law the effect on a contract of mistake as to the identity of the party.

3. (a) X offered a reward of £100 to any person "who will give such information as shall lead to the apprehension and conviction of the person guilty of the murder." A supplied the requisite information before he knew of the offer. Discuss whether A can claim the reward.

(b) The defendant offered to sell specific goods to the plaintiff on certain terms and to keep the offer open until 4 o'clock that day. The plaintiff averred that he did agree within the time allowed, but that the defendant failed to deliver.

Discuss whether the plaintiff is entitled to any relief.

4. (a) "Consideration may be executory or executed, it must not be past." Discuss.

(b) Eastwood, as guardian and agent of Mrs. Kenyon, while she was a minor, had incurred expenses in the improvement of her property: he did this voluntarily, and in order to do so was compelled to borrow money, for which he gave a promissory note. When the minor came of age she assented to the transaction, and after her marriage her husband promised to pay the note. Can Mrs. Kenyon be sued upon this promise?

5. "The absence of proof of an intention to deceive does not in all cases deprive of a remedy the person who has in fact suffered from deception."

Discuss with reference to case law.

6. State the rules as laid down in *Maxim Nordenfelt Gun Co. v. Nordenfelt*, and discuss the applicability of those principles in India.

7. Discuss the rights and liabilities of the parties where the existence of the principal is undisclosed.



## SECOND HALF

Examiners— { Mr. J. N. MAJUMDAR, M.A., B.L.,  
BAR.-AT-LAW.  
,, M. A. ISPAHANI, M.A., BAR.-AT-LAW.

1. "Every injury imports a damage though it does not cost the party one farthing." Explain.

2. Distinguish Conversion from Trespass.

The defendant, a shop-keeper, receives from the plaintiff a parcel, containing bank notes, which the latter picked up from the floor of the defendant's shop; the plaintiff when he hands the parcel to the defendant tells him to keep the same till the owner claims it. The defendant advertises the parcel but no one claims it, and three years having elapsed, the plaintiff requests the defendant to return to him the notes, at the same time tendering the cost of advertising and even offering an indemnity. The defendant refuses. Is the plaintiff entitled to any relief?

3. Discuss the principles enunciated in *Smith v. Baker* (1891) A.C. 325.

4. What do you understand by the natural and probable consequences of an act in Tort? Give examples.

5. "There is no contribution between joint tortfeasors." Discuss this doctrine, its limitations, and exceptions.

6. Write short notes on :—

(a) Novation; Justifiable Assault.

Or,

(b) Merger; Privileged Communication.

7. State the rule in *Rylands v. Fletcher* and discuss the exceptions to that rule.

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# Final Examination in Law

## February, 1931

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### LAND TENURES

*The questions are of equal value*

#### FIRST HALF

*Examiners—* { MR. MANMATHANATH RAY, M.A., B.L.  
 ,, SACHINDRAKUMAR RUDRA, M.A., B.L.

*Answer any FIVE of the following questions*

1. Write a short essay on the "Permanent Settlement" of Bengal, Behar and Orissa, discussing its merits and demerits.
2. Specify the Lakhiraj grants which were declared valid by Regulation XIX of 1793.
3. Give an account of the origin of the Patni tenures and state the provisions enacted in Regulation VIII of 1819 for the summary sale of such tenures.
4. What are the rights of a purchaser of an entire estate sold for arrears of revenue under the Revenue Sale Law?
5. Enumerate the grounds on which a sale held under the provisions of Act XI of 1859 may be set aside.
6. On what principles would you support the proposition that a Patnidar is entitled to the Chowkidari Chakran lands resumed by the Government and settled with the Zemindar? Is the Patnidar liable to pay additional rent for those lands? If so, why?
7. What is meant by "reformation in situ"? State the provisions of Regulation XI of 1825 on the subject and explain the same with reference to the case of *Lopez v. Madan Mohan Thakur*, 13 M.I.A. 463.

#### SECOND HALF

*Examiners—* { MR. GOPALCHANDRA DAS, M.A., B.L.  
 ,, SADHANCHANDRA RAYCHAUDHURI, M.A., B.L.

*Answer any FIVE of the following questions*

1. What are the different classes of tenants under the Bengal Tenancy Act? How do you distinguish between a tenure-holder and a raiyat?
2. State the grounds on which, and the mode in which, the rent of an occupancy-raiyat may be enhanced.
3. Examine the question of the transferability of occupancy right in Bengal before the amendment of the Bengal Tenancy Act in 1928.
4. A, who is an occupancy raiyat under B, sells a part of his holding to C and then surrenders the entire holding in favour of his landlord B. B brings a suit to eject C. Discuss the rights of the parties.

5. State fully the distinction between a rent-decree and a money-decree. Illustrate by giving examples.

6. What are "protected interests" and "incumbrances" under the Bengal Tenancy Act? Explain by giving illustrations.

7. What are the different modes of acquisition of easements? What is an easement of necessity?

## EQUITY AND TRUSTS

*Only FIVE questions are to be answered in EACH half*

*The questions are of equal value*

*Candidates are requested to give the answers in their own words  
as far as practicable*

### FIRST HALF

*Examiners—* { MR. PRAMATHANATH MITRA, M.A., B.L.  
,, B. C. KAR, M.A., B.L., BAR.-AT-LAW.

1. Compare the relation of *trustee* and *beneficiary* with that of (a) *bailor* and *bailee*, and (b) *principal* and *agent*.

2. "Equity is not a self-sufficient system. It is a collection of appendices." Explain.

3. What is a *charitable trust*? Is it correct to say that the rule against Perpetuity does not apply to such trust?

4. Distinguish between a trustee's (a) duties, (b) discretion, and (c) duties coupled with discretion. Give an example of each.

5. "Equity looks to the intent rather than to form."

Explain and criticise with illustrations.

6. "An imperfect gift will not be construed as a declaration of trust." Explain noting exceptions, if any, to the rule.

7. "A trust shall never fail for want of a trustee." Explain and show how the want is supplied.

### SECOND HALF

*Examiners—* { MR. P. MITTER, BAR.-AT-LAW.  
,, ANIN AHMED CHAUDHURI, M.A., LL.B.,  
BAR.-AT-LAW.

1. What is meant by a "trust of imperfect obligation?" Give instances.

2. Examine the character of trusteeship of an unpaid vendor of land.

3. Is an executor or administrator as such a trustee for the legatee or next of kin?

4. What are the Statutes of Limitation, and when are they not a good defence to an action for breach of trust?

5. What are the defences available in a suit for specific performance? Illustrate your answers with examples.

6. "While remedy by damages is a matter of strict right, the remedy by injunction is not."

Discuss and amplify.

7. A conveys land to B upon trust to sell and apply one moiety of the proceeds for certain charitable purposes; the other for the maintenance of an idol. B sells the land. Some of the charitable purposes wholly fail and the maintenance of the worship of the Thakur does not exhaust the second moiety of the sale proceeds. What should be done in the circumstances to the proceeds?

## EVIDENCE AND CIVIL PROCEDURE

*The figures in the margin indicate full marks*

*Only FIVE questions in EACH half to be attempted*

### FIRST HALF

Examiners— { MR. S. C. MUKHERJEE, M.A., B.L.,  
BAR.-AT-LAW.  
.. J. N. MAJUMDAR, BAR.-AT-LAW.

1. Explain the following :— 10
  - (a) Circumstantial evidence.
  - (b) Judicial notice.
  - (c) Presumption.
2. "The best evidence must always be given." Explain the maxim and point out its chief applications in the law of evidence. 10
 

*Or,*

What do you understand by the term 'secondary evidence'? 10  
Enumerate the circumstances under which it may be given.
3. State the leading principles which regulate the burden of proof. 10
4. Write a short essay on estoppel. 10
5. State and discuss the principle laid down in *Basanta Kumar Roy v. Secretary of State for India* (I.L.R. 44 Cal. 858=44 I.A. 104). 10
6. Write a short note on the doctrine of "suspension of limitation." 10

### SECOND HALF

Examiners— { MR. RATANMOHAN CHATTERJEE, M.A., B.L.  
.. SACHINDRAKUMAR GUHA, M.A., B.L.,  
BAR.-AT-LAW.

1. Explain the terms :— 10
  - (a) Mesne profits, (b) precepts.
2. Write a short note on res judicata, bringing forth its basic principle. 10
3. Discuss the law relating to restitution on the reversal of a decree. 10

*Or,*

- Under what circumstances can a sale in execution of a decree be set aside at the instance of— 10
- (a) the decree-holder,
  - (b) the judgment-debtor,
  - (c) the auction purchaser?

4. Discuss the principles laid down in *Hriday Nath Roy v. Ramchandra Barua* (I.L.R. 48 Cal. 138=31 C.L.J. 482). 10

5. A obtains a decree for money against B in 1913 in the Court of the Subordinate Judge at Howrah. In 1915, the decree is assigned by A to C, without having applied execution. C comes to you for conducting the execution proceedings. He gives you the instruction to proceed against an immovable property of B which is situate within the jurisdiction of the said Subordinate Judge of Howrah. Sketch the progress of the execution proceedings. 10

Or,

A approaches you with the proposal to sue :— 10

(a) The Secretary of State for India in Council.

(b) A Receiver appointed by the High Court in its Ordinary Original Jurisdiction.

What would you do in order that the suits when launched may be good ones?

## CRIMINAL LAW

*The figures in the margin indicate full marks.*

*Candidates shall give their answers in their own words  
as far as practicable*

### FIRST HALF

Examiners— { Mr. CHANDRABHUSHAN BANERJEE, B.L.  
                  ,, MANINDRANATH BANERJEE, B.L.

1. Discuss what offence, if any, A has committed in any two of the following cases :— 10

(a) B obtains a decree against A for recovery of a certain plot of land which had previously been in the possession of A. Thereafter B goes with a Civil Court peon to obtain possession of the land. A, with ten of his friends, assaults B to prevent the delivery of possession.

(b) A pawns his watch to B for Rs. 50. A few days later, A removes the watch from B's possession intending thereby to deprive B of the security for his money.

(c) A, in the course of a speech, exhorts his audience to use indigenous goods to the exclusion of British goods saying that would have the effect of touching the pockets of the English who are a nation of shop-keepers, who came to India at the time of the Moghuls bowing a hundred times to the Moghul emperor for permission to trade in India; and, if their pockets could now be touched, the highest officer of the Government of India will have to approach the popular leaders making similar bows and praying for peace.

(d) A says of B, "I do not believe what B said as a witness at the trial, for B is an unmitigated liar."

2. On January 1, 1930, A receives an information that his enemy, B, had collected men and arms with the object of dispossessing A from his property. A, without taking any steps to inform the police or to complain to a Magistrate, collects men and arms himself to fight B. Six days later, B comes with his men armed, and threatens A's party with violence unless they cleared out of the property. Thereupon A, 10

who had been prepared beforehand, attacks B's party, causes hurt to some of them, and ultimately drives them away.

Advise A if he can successfully plead the right of private defence. Would it make any difference in your advice if the attack by B's party were sudden and unexpected, and A and his men took up whatever they could then lay their hands upon and assaulted B's party?

Or,

A comes to B and threatens to waylay and kill him some day unless B immediately gave him Rs. 500. A takes up a revolver and shoots B dead. 10

Advise A if the right of private defence would be available to him in a trial on a charge of murdering B. Would it make any difference if B had pointed a revolver at A threatening to kill A immediately unless he parted with the money?

3. A leaves with B, his agent, a cheque on a banker signed by A without inserting the sum payable and authorising B to make certain payments on behalf of A, not exceeding Rs. 5,000. B finds that A's debts amount to Rs. 6,000; and, believing that A would approve of his conduct if he paid off the whole of A's debts, fills up the cheque by inserting the sum of Rs. 6,000. A thereupon charges B with forgery. B approaches you for your opinion if he could successfully defend the case. What opinion would you give? 10

Or,

A, B, and C are jointly tried on charges of dacoity and criminal conspiracy to commit the dacoity. It is proved at the trial that B and C participated in the dacoity since some days before the dacoity they lived together and met together secretly. A is only proved to have been friendly with B and C, having sheltered them in his own house for a week up to the morning of the day of occurrence when B and C left the place. Can you in such circumstances justify the conviction of all the three on the charge of criminal conspiracy to commit the dacoity? 10

4. "A person who, unconsciously, in a state of drunken sleep, does an act which causes the death of another, is not criminally liable for the act." Discuss this with reference to the English law noting any difference from the Indian law on the subject. 10

Or,

"Even in cases where innocence of intention is a defence, innocence of motive is no defence." Explain and illustrate this with reference to the doctrine of *mens rea* in the English criminal law. 10

5. Discuss the principles of law laid down in the case of *Queen Empress v. Bal Gangadhar Tilak*, I.L.R. 22 Bombay 112. 10

## SECOND HALF

Examiners—{ Mr. J. BAROOAH, BAR.-AT-LAW.  
,, BHOLANATH RAY, M.A., B.L.

1. Discuss briefly the principles of procedure laid down in the case of *Barindra Kumar Ghosh v. Emperor*, I.L.R., 42 Cal. 957. 10

2. On what grounds can the Court of Criminal Appeal in England allow an appeal against a conviction?

Or,

State the powers of the following Courts when the Jury cannot come to a unanimous verdict:— 10

(a) A criminal Court in England.

(b) A Judge presiding over a High Court Sessions in India.

(c) A Sessions Judge in the mufassil in India.

3. At what stage of a trial should a person accused of an offence, and entitled to claim to be dealt with as an Indian British subject, make his claim? What would happen if such a person does not make his claim in proper time? Is the trial of a person, dealt with on the footing that he is an Indian British subject when he is really not so, vitiated by reason of his being so dealt with? 10

Or,

What would be the effect of the trial by Jury of a man charged with an offence triable with the aid of assessors, and of the trial with the aid of assessors of a man charged with an offence triable by a Jury? 10

4. A, B and C are charged with having committed an offence punishable with imprisonment which may extend to ten years. For what purpose, and on what conditions, can a competent Court tender pardon to A? When can the pardon to A be revoked after A is examined as a witness against B and C? 10

Or,

What different courses are open to a person who has been served with a conditional order to remove an unlawful obstruction from a public way? 10

5. Discuss the validity or otherwise of the trial in any two of the following cases :— 10

(a) A and B are accused of a theft in the house of C. B is further accused of two other thefts in the houses of D and E. A and B are tried at the same trial, both being charged with the theft in the house of C, and B alone being further charged with the two other thefts.

(b) A and B are accused of robbery in the course of which A commits a murder with which B has nothing to do. A and B are tried at the same trial, both being charged with robbery, A alone being further charged with murder.

(c) A is charged with having committed defalcation of four several items of money in the course of eighteen months.

(d) A is convicted of an offence triable as a warrant case without any charge having been framed against him at all.

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July, 1931

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## LAND TENURES

*The questions are of equal value*

### FIRST HALF

Examiners—{ MR. SITARAM BANERJEE, M.A., B.L.  
 ,, SADHANCHANDRA RAYCHAUDHURI, M.A., B.L.

*Answer ANY FIVE of the following SEVEN questions*

1. What was the object underlying the Putni Regulation? Describe clearly the status acquired by the Putnidar under the said Regulation.

2. What do you understand by a 'lakheraj grant'? Write a short thesis on the 'resumption of an invalid lakheraj grant.'

3. What is the status conferred on the Zemindars by the Permanent Settlement? Is the Zemindar the owner of the soil and everything underneath it?

4. State and explain the grounds on which a sale held under Act XI of 1859 can be set aside.

5. "Fish follows the river and the fisherman the fish." Explain and discuss.

6 Distinguish between 'accretion' and 'reformation in situ,' and describe the rights of the contiguous owners in reference thereto.

7. Describe the rights of a purchaser in a sale for arrear of revenue of (i) an entire estate, and (ii) a part of an estate.

### SECOND HALF

Examiners—{ MR. APURBACHARAN MUKHERJEE, M.A., B.L.  
,, NIRMALKUMAR SEN, M.A., B.L.

*Answer any FIVE of the following SEVEN questions*

1. Is the Bengal Tenancy Act an exhaustive and complete code in itself? Illustrate your answer.

2. What is the object of the Legislature in curtailing the contractual powers of the ryot? Give three concrete illustrations, showing how the contractual powers have been curtailed.

3. Describe the incidents of the holding of an occupancy ryot on the following heads :-

- (a) Use of land including trees,
- (b) Transfer,
- (c) Ejectment, and
- (d) Enhancement of rent.

4. State and illustrate the rule as to the fixity of rent as laid down in Section 50 of the Bengal Tenancy Act, and describe the circumstances under which the presumption laid down in that Section arises. Explain and illustrate as to how that presumption can be rebutted.

5. "Rent is a first charge on a tenure or holding." Explain and discuss, referring to a leading case on the subject.

6. What is the nature of the right that is acquired by the purchaser in a sale (voluntary or compulsory) of a non-transferable occupancy holding? Refer to leading cases.

7. What are the powers of a purchaser of a tenure or holding in execution of a decree for arrears of rent due thereof? State briefly the steps that are to be taken for the exercise of such powers by such purchaser.

### EQUITY AND TRUSTS

*Candidates are requested to give their answers in their own words as far as practicable*

*Only FIVE questions are to be answered in EACH half*

*The questions are of equal value*

#### FIRST HALF

Examiners—{ MR. SATYACHARAN SINHA, M.A., B.L.  
,, P. MITTER, B.A., Bar.-at-Law.

1. "Equity had come not to destroy the law, but to fulfil it." Discuss.



2. Distinguish between "Charitable" and "Purpose" Trusts.

3. "Technical words are to be technically construed, but a trust can be created by the most untechnical of words." Develop.

4. (i) A promises, in writing, to convey his house in Central Avenue to trustees upon trust for B if B marries A's daughter, and B does so.

(ii) A makes a similar promise in writing to B, because B has already married A's daughter.

Is the promise enforceable, either at law or in equity, in the above cases? In the second case, will it make any difference to B if the promise be made under seal?

5. (a) A trustee employs a solicitor for legal business in connection with the trust estate.

(b) A trustee, who is a solicitor, does such legal work himself.

(c) A trustee is obliged to travel on estate business.

Is the trustee entitled to be re-imbursed from the trust estate? If so, in which of these cases? Give your reasons.

6. What precautions must a trustee take (a) when selling trust property, and (b) when buying it himself?

7. State briefly the facts of, and the principle involved in, the case of "*The Mayor of Lyons v. The Advocate-General of Bengal.*"

## SECOND HALF

Examiners— { MR. AMIN AHMED CHAUDHURI, M.A., LL.B.,  
BAR.-AT LAW.  
( DR. SUSILKUMAR DATTA, LL.D., BAR.-AT-LAW.

1. Explain the term "Constructive Notice" and show when it is held to apply.

2. What is an Equitable Mortgage? How can it be created and what are the risks involved in it?

3. Write a short note on the doctrine of "Part Performance."

4. What is meant by (a) "Satisfaction" of debt by legacy, and (b) "Ademption" of legacy by portion?

5. X is the owner of Greenacre; T, a testator, devises Greenacre to Y and bequeaths to X a legacy of Rs. 10,000.

What is the equitable doctrine applicable here? Is it based on compensation or confiscation?

6. How far is (a) a vendor, (b) a mortgagee of land, a trustee for purchaser and mortgagor respectively?

7. What is an Injunction? Explain and illustrate the part played by it within the province of Contract.

## EVIDENCE AND CIVIL PROCEDURE

*The questions are of equal value*

*Only FIVE questions to be attempted in EACH half*

## FIRST HALF

Examiners— { MR. MANMATHANATH RAY, M.A., B.L.  
,, J. BAROOAH, BAR.-AT-LAW.

1. Write a short note on the relevancy of evidence, giving examples.

2. Discuss the facts of which the Court will take judicial notice and need not be proved.

3. Discuss how far a judgment in a previous suit in which one of the parties in a subsequent suit was not a party can be used in evidence against him.

4. "What is in writing, shall only be proved by the writing itself." Discuss the exceptions to this rule.

5. What are leading questions? When and under what circumstances can they be put? Can you cross-examine your own witness?

6. Discuss the requisites and the effects of (i) acknowledgment and (ii) fraud in extending the period of limitation under the Indian Limitation Act.

7. "When land has been in a condition unfit for actual enjoyment a presumption will be drawn that possession follows title." Explain and discuss by reference to leading cases.

## SECOND HALF

*Examiners*—{ Mr. S. B. SINHA, BAR.-AT-LAW.  
,, BIPINCHANDRA MALLIK, M.A., B.L.

1. Explain the distinction between (i) decree and order, and (ii) preliminary decree and final decree, giving examples.

2. Write a short note on the properties which cannot be attached or sold in execution of a decree.

3. On what principle and in what cases is the institution of a fresh suit for a relief which is obtainable by application for execution barred?

4. State the special procedure provided in the Civil Procedure Code when a party is a minor. How should the plaintiff proceed on the death of a defendant?

5. What are the remedies open to a plaintiff whose suit has been dismissed for want of prosecution? Can those remedies be followed simultaneously?

6. What are the principles on which (i) a temporary injunction may be issued, and (ii) a Receiver may be appointed?

7. "A Court has inherent power to do justice." Discuss by reference to leading cases.

## CRIMINAL LAW

*The questions are of equal value*

*Candidates are to answer any FIVE questions from either half*

### FIRST HALF

*Examiners*—{ Mr. S. P. MOOKERJEE, M.A., B.L., Bar.-at-Law.  
,, CHANDRABHUSHAN BANERJEE, M.A., B.L.

1. "A sane adult person is presumed to intend the natural consequences of his conduct." Explain and illustrate this with reference to the doctrine of *mens rea*.

2. When do the following afford a good and when a bad defence to a criminal action?—

Minority, unsoundness of mind, and intoxication.

3. Are there any limitations to the exercise of a person's right of defence?

A is attacked by a mob. A fires at the mob and kills certain innocent children who happen to be near. Is A liable for the death of the children?

4. Distinguish between the following groups of offences as defined in the Indian Penal Code :—

- (a) Theft, robbery and dacoity.
- (b) Wrongful restraint and wrongful confinement.

5. A, a jailor, has the charge of Z, a prisoner. A, intending to cause Z's death, illegally omits to supply Z with food, in consequence of which Z is much reduced in strength but the starvation is not sufficient to cause his death. A is dismissed from his office and B succeeds him. B, without collusion or co-operation with A, illegally omits to supply Z with food, knowing that he is likely thereby to cause his death. Z dies of hunger. Discuss the liability of A and B.

6. Advise A as to his liability under the Indian Penal Code if in writing an article headed "Bankruptcy of India," he writes: "The ever-increasing poverty of India is due to the crushing over-taxation of the people by a foreign government whose declared policy is that India must be bled white."

7. Discuss briefly the principles laid down in *Ganourilal Das v. King Emperor*, I.L.R. 16 Cal. 206.

## SECOND HALF

*Examiners*—{ MR. BIRBHUSHAN DATTA, M.A., B.L.  
,, MANINDRANATH BANERJEE, M.A., B.L.

1. Enunciate the principles laid down in *Ali Mahammad Mandal v. Piggot*, 32 C.L.J. 255.

2. What do you understand by the following expressions as used in English Criminal Law?—

(i) Accessory after the fact; (ii) benefit of the doubt; (iii) the inquest.

3. Define (i) Summons case, (ii) Warrant case. Point out the differences in the procedure adopted in the trial of a summons case and a warrant case.

4. Write a short note dealing with the respective duties of the judge and the jury in a sessions trial.

A is tried for the murder of B. What should be the duty of the Judge to explain to the jury, and what should be the duty of the jury to decide?

5. Distinguish between Dismissal of a complaint, Discharge, and Acquittal.

What are the remedies available to (i) the complainant and (ii) the Crown, in each of these cases?

6. Discuss the validity of the trial in the following cases :—

(a) A is tried at the same trial on two charges, one of stealing a watch from B's table on one occasion and the other of causing hurt to B on a different occasion.

(b) A and B are accused of robbery, in the course of which A commits a murder with which B has nothing to do. A and B are tried at the same trial, both being charged with robbery, A alone being further charged with murder.

7. Where should the following offences be enquired into and tried?—

- (i) Offences against the Railways and Telegraph Acts;
- (ii) An offence committed while the offender is in the course of performing a journey.
- (iii) A charge of receiving or retaining stolen goods.

# D. P. H. Examination, May, 1931

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## PART I

### BACTERIOLOGY AND PARASITOLOGY

*Examiner*—LT. COL. R. KNOWLES, I.M.S.

*The questions are of equal value*

*Only FOUR questions are to be answered*

1. What diseases are contracted in India by eating diseased meat? Enumerate and classify them according to their aetiological agents. Describe the aetiology of *any two* of these infections.
2. By what laboratory methods would you establish the diagnosis of plague (a) in man, and (b) in a dead rat? How is anti-plague vaccine prepared and used? What species of fleas transmit plague from rat to man, and how are they identified? What is the cause of the seasonal variation of plague in India?
3. What types of infection with anthrax are encountered in India? How would you establish the diagnosis in the laboratory? How would you ascertain whether a shaving brush was, or was not, infected with anthrax bacilli?
4. By what laboratory methods would you establish the diagnosis of cholera infection (a) in an acute case of the disease, and (b) in a convalescent cholera carrier?
5. Describe the life-history of *Filaria bancrofti*. Enumerate the different types of lesions produced by infection with this worm, and discuss their pathogenesis. How is it that one and the same parasite gives rise to such very different clinical symptoms in different parts of India?

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### CHEMISTRY AND PHYSICS

*Examiner*—LT.-COL. A. D. STEWART, M.B., F.R.C.S.E.,  
D.P.H., D.T.M.H., I.M.S.

*The questions are of equal value*

1. Discuss the value of a knowledge of ultra-violet rays to the public healthworker. State what you know of these rays and their use from the above point of view.
2. What circumstances determine the amount of dissolved oxygen present in water at a particular time?  
How would you determine—  
(a) the amount of dissolved oxygen present in water at a particular time,

(b) the rate at which dissolved oxygen is being absorbed by substances present in the water?

What amounts are found ordinarily in rivers and tanks in India?

3. What is an unsaturated fatty acid? To what extent do such acids occur in nature in edible fats and oils? How is the amount present determined? How would this figure be likely to vary with the other common chemical constants?

4. In what substances consumed by man is lead likely to be occasionally found? What amounts would you consider injurious? How would you determine the amount present in one of the substances mentioned by you?

## PART II

### HYGIENE AND SANITATION, INCLUDING SANITARY ENGINEERING

*Examiner*—DR. B. B. BRAHMACHARI, M.B.

*The questions are of equal value*

*All FOUR questions to be answered*

1. A town with a population of 20,000, situated on the upper part of the river Hughli, requires public water supply. Discuss the suitability of the different kinds of filter for the purpose from economic, engineering, and hygienic points of view.

2. Tuberculosis is highly prevalent in Calcutta, and its incidence is much higher among the females than among the males. Discuss the influence of dwelling houses on the prevalence of the disease. How would you construct them that they may be healthy?

3. What are the risks to public health from a trenching ground for disposal of nightsoil? A population of 10,000 requires a trenching ground, the only land available is in the paddy fields. How would you lay out the trenching ground, and work it so that it may be fairly safe to the public and to the staff working there?

4. It is reported to you in the morning that there was a feast in the previous night and that some of the guests have been very ill. How would you proceed to find out the cause of it?

### EPIDEMIOLOGY AND INFECTIOUS DISEASES

*Examiner*—DR. TARAKNATH MAJUMDAR, D.P.H., D.T.M., L.M.S.

*The questions are of equal value*

1. Mention the names of the Anopheles which are responsible for the spread of malaria in Bengal and India, respectively. You have got an annual grant of Rs. 50,000 for anti-malarial measures in a town of 2,00,000 inhabitants, with an area of 6 square miles. Draw up a scheme, as Health Officer of the town, for the reduction of malaria.

2. State the ranges in duration of periods of (a) incubation, (b) fever, (c) infectivity, (d) quarantine period in each of the following diseases, and show how the knowledge may be applied for the prevention of these diseases, namely, small-pox, cholera, plague, yellow fever, typhoid fever, typhus, scarlet fever, measles and diphtheria.

3. Give an account of the methods of preventive inoculation which are being adopted for the control of infectious diseases in the human subject, and give your opinion regarding the value of the methods in each case. State the dose and strength of the vaccines, etc., used in each case.

4. Describe fully the methods for the destruction of—

(a) flies,

(b) rats on land and on shipboard.

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## SANITARY LAW, VITAL STATISTICS, AND PUBLIC HEALTH ADMINISTRATION

*Examiner*—R. B. KHAMBATA, Esq., D.P.H., L.R.C.P.,  
M.R.C.S.

*The questions are of equal value*

*All questions to be answered*

1. What is the meaning of permissive and mandatory legislation? Give examples of such legislations in Bengal and in India generally. Do you consider the Indian Epidemic Diseases Act of 1897 gives sufficient powers to Local Governments to stamp out or to prevent an epidemic of malaria?

2. What statistical data are necessary for the preparation of death-rates and birth-rates? What is the value of birth-rates and death-rates from a public health point of view? How is the infantile death-rate usually calculated, and why is a different method employed in calculating the infantile death-rate from that employed in stating the general death-rate?

3. What are the duties of health officers in Bengal? What is their legal position, and what are their powers?

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## D.P.H. Examinaton,

August, 1931

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### PART I

### BACTERIOLOGY AND PARASITOLOGY

*Examiner*—DR. C. C. BOSE, B.A., M.B.

*The figures in the margin indicate full marks*

1. Write, briefly, on the part played by human beings in the spread of infectious diseases. How would you identify a typhoid carrier? 10
2. How does Anthrax bacillus infect man? How would you look for evidences of anthrax infection in a carcass? 10

8. Describe the parasite of Kala Azar and review the problem of its transmission. 10
4. Write short notes on the following:— 20
- (a) *Spirillum minus*.
  - (b) *Filaria Bancrofti*.
  - (c) Bacteriophagy.
  - (d) Complement fixation.

## CHEMISTRY AND PHYSICS

*Examiner*—DR. B. B. BRAHMACHARI, M.B.

*The questions are of equal value*

1. What kind of lever is the balance you used in the chemical laboratory? Discuss the position of the centre of gravity of the system in relation to the fulcrum.

On what does the sensitiveness of the balance depend?

How would you test the balance to see if it is true? If it is false, what can it be due to, the beam being in exact equilibrium when there is no load on the pans?

2. Give the proportions of the different proximate principles of food in the wheat flour. How would you proceed in your analysis for their determination?

What is complete protein? Compare the constituents of gelatin, wheat proteins, and meat proteins from the dietetic standpoint of view.

3. How would you estimate available chlorine in a sample of bleaching powder? Give equations of the reactions involved in your analysis.

4. Give the composition of fresh air, expired air, and residual air of the lungs. Compare the wholesomeness of the air vitiated with respiration containing 2 per thousand of CO<sub>2</sub> with that of a well-ventilated aerated water factory containing 2 per cent. of it.

How would you estimate CO in the air of a dwelling room? You find it to be 9.5 mgm. in 4.5 litres of the air, express it in the ratio per thousand by volume, the temperature being 80°F. and pressure, 29.3 inches.

## PART II

### HYGIENE AND SANITATION INCLUDING SANITARY ENGINEERING

*Examiner*—R. B. KHAMBATA, ESQ., D.P.H., L.R.C.P.,  
M.R.C.S.

*The questions are of equal value*

*All FOUR questions to be answered*

1. What are the diseases due to "Smoke Nuisance" or pollution of a town by smoke, and what remedies would you propose for the abatement of the pollution? Is there any time limit which you might suggest for smoke emission?

2. Describe what is meant by general contamination of milk. What is the result of such contamination? State fully the precautions necessary in (1) the byre, (2) the milk shops, and (3) the dwelling, to prevent such contamination.

3. Describe, in detail, the construction of a "Cool Room" in any public institution, a hall or a theatre, which you may have seen. On what principles is the current of hot air cooled and ventilation of the room maintained? Are there any dangers or risks to health involved by dwelling constantly in a "Cool Room" in Calcutta?

4. The word "Bonification" or "Bonificazione" is frequently used in Bengal and in Italy in connection with the subject of Malaria and Agriculture. Explain fully its meaning and state what you know of this particular method of combating malaria in Bengal and in Italy.

## EPIDEMIOLOGY AND INFECTIOUS DISEASES

*Examiner*—DR. TARAKNATH MAJUMDAR, D.P.H., D.T.M.,  
L.M.S.

*The questions are of equal value*

1. What are the seven Principal Zymotic diseases? Give the incubation period of the principal zymotic diseases and the period of quarantine you would insist on in the case of a contact in each case.

2. You are in charge of a town with a population of 100,000 persons as Medical Officer of Health. The death rate from Tuberculosis in the town is 2.8 per mille. Draw up a scheme for the reduction of Tuberculosis in the town, the funds at your disposal being Rs. 50,000 annually.

3. There are a large number of lepers in a town in Bengal of which you are the Health Officer. What measures would you recommend and adopt in order to prevent the spread of the disease? What powers are given to you under the existing laws, and what additional powers would you suggest as necessary to deal with this question?

4. You are the Medical Officer of Health of a town in India with a population of 5,00,000. Draw up a scheme for the reduction of venereal diseases in the town, the funds at your disposal being Rs. 2,00,000 annually for the purpose.

## SANITARY LAW, PUBLIC HEALTH ADMINISTRATION, AND VITAL STATISTICS

*Examiner*—LT.-COL. A. D. STEWART, M.B., F.R.C.S.F.,  
D.P.H., D.P.M. & H., I.M.S.

*The questions are of equal value*

*ALL questions to be answered*

1. What are specific death rates? Explain their importance to the sanitarian. How may they be used—

- (a) In correcting or standardising crude death rates?
- (b) In investigating health problems in different countries?
- (c) In constructing Life Tables?



2. Enumerate the legislation dealing with health and welfare of industrial workers (men, women, and children) in (a) England and Wales, and (b) in India.

Indicate *briefly* the aim and scope of this legislation.

What defects may be said to exist in the legislation of India quoted by you? What remedies have been recently suggested?

3. "India is at present mainly a nation of rural villages." Explain how this has aided or retarded the progress of public health, using England as an analogy.

Explain the system of health organisation in rural areas in Bengal at present. Discuss its merits and demerits.

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# Preliminary Scientific M.B. Examination,

## April, 1931

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### ORGANIC CHEMISTRY

( PROF. JNANENDRANATH MUKHERJEE, D.Sc.  
(Lond.)

DR. SUDHAMAY GHOSH, D.Sc.

**Examiners—** MR. P. C. RAY, M.A.

LT.-COL. T. C. BOYD, I.M.S.

DR. BENIMADHAB CHAKRABARTI, B.A., F.C.S.,  
L.M.S.

,, QUDRAT-I-KHUDA, D.Sc.

*Only THREE questions are to be attempted in EACH half*

*The questions are of equal value*

#### FIRST HALF

1. An organic compound contains a halogen and sulphur. How do you propose to detect them and estimate either of them?

2. What are the amino acids? Why are they so important to a student of medical chemistry? Describe the preparation and properties of *any two* of them.

3. Give a short account of *any three* aromatic antiseptic. How are they prepared?

4. Describe the preparation, properties, and uses of the following : (a) Aspirin, (b) Chloral Hydrate, (c) Amyl Nitrite. (d) Sulphonal.

#### SECOND HALF

1. Give a short account of two of what you consider as the most important purine bodies.

2. Discuss the action of—

(a) Mineral Acids on Cane Sugar,

(b) Nitric Acid on Phenol,

(c) Nitrous Acid on Aniline.

3. What is a primary alcohol? How can it be distinguished from the members of the other two classes? How is amyl alcohol prepared?

4. Give the general principles for extraction of an alkaloid from a plant, and state how you would satisfy yourself that an alkaloid is present.

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## INORGANIC CHEMISTRY

*Examiners—* { PROF. JNANENDRANATH MUKHERJEE, D.Sc. (Lond.)  
 DR. SUDHAMAY GHOSH, D.Sc.  
 MR. P. C. RAY, M.A.  
 LT.-COL. T. C. BOYD, I.M.S.  
 DR. BENIMADHAB CHAKRABARTI, L.M.S.  
 „ QUDRAT-I-KHUDA, D.Sc.

*Only THREE questions are to be attempted in EACH half*

*The questions are of equal value*

## FIRST HALF

1. Explain the following terms : (a) Hydrogen Ion Concentration and (b) Mass Action.
2. How is Ammonia commercially prepared? What are its properties and uses? Mention a very delicate test for Ammonia.
3. Describe the preparation, properties, and uses of the following :—  
 (a) White Arsenic.  
 (b) Sodium Bicarbonate.  
 (c) Cuprous Chloride.  
 (d) Nitre.
4. How is Carbon Disulphide prepared? Mention its properties and uses.

## SECOND HALF

1. What is a decinormal solution? What volume of concentrated sulphuric acid (specific gravity 1.84 and containing 95.6 per cent. of pure  $H_2SO_4$ ) will be required to make 500 c.c.s. of a decinormal solution?
2. Define the following terms with examples : (a) Acid Salt, (b) Basic Salt, (c) Acid Anhydride, (d) Water of Constitution.
3. State Avogadro's hypothesis, and explain, with illustrations, its usefulness in fixing molecular weights.
4. Describe what happens when—  
 (a) Chlorine is passed through a solution of caustic soda;  
 (b) Stannous chloride is added to a solution of ferric chloride;  
 (c) Sulphur dioxide is passed through a solution of potassium dichromate;  
 (d) Solution of sodium thiosulphate is added to a solution of I in KI.

## PHYSICS

*Examiners—* { PROF. T. D. KAR, M.A.  
 MR. NIPARANCHANDRA RAY, M.A.  
 PROF. D. M. BOSE, M.A., Ph.D.  
 „ GOPALCHANDRA BHATTACHARYYA, M.Sc.

*The questions are of equal value*

*Only three questions to be attempted in each half*

## FIRST HALF

1. Describe Fortin's Barometer, and explain its adjustments. What are the corrections applied, and why? Explain, as thoroughly as you can, the meaning of the statement "Normal pressure is 760 mm."

2. What do you understand by osmotic pressure? State the laws and combine them into a single formula.

Calculate the strength of a glucose solution which exerts an osmotic pressure of 11·2 atmospheres. Molecular wt. of glucose=180.

3. Give a general description of the human ear, and explain how sound vibrations are propagated through it.

4. Define dew point and humidity. Explain the theory of the dew point hygrometer.

Calculate the vapour pressure when the temperature of air is 30°C, and humidity is 25 per cent. the maximum vapour pressure at 30°C. being 32 mm.

5. Define principal planes and focal length of a thick convex lens. Draw a diagram to obtain the position of the image of an object placed in front of a thick convex lens, the principal planes and focal points being given.

If  $m_1$  and  $m_2$  be the magnifications produced by a thick convex lens when the object is placed respectively at  $d_1$  and  $d_2$  distances from its pole, calculate the focal length.

## SECOND HALF

6. Explain what you understand by rotatory polarisation.

Give a sectional diagram of a polarimeter, and explain its use.

7. Define magnifying power of a microscope, and explain any practical method for finding it. On what does it depend, and how does it vary with the tube length?

8. The terminals of a cell of E.M.F. 2 volts are connected through a resistance of 1,000 ohms to a galvanometer of resistance 200 ohms and shunted by a resistance of 50 ohms. Calculate the current through the galvanometer. If a deflection of 15 mm. be obtained on a scale placed at 150 cm. from the mirror of the galvanometer, calculate the sensitiveness of the galvanometer.

9. Explain the theory and the method of finding pH of a solution by the potentiometer.

Calculate the pH of a N/10 alkali solution, 10 per cent. dissociated.

10. Describe, in detail, any gas tube for producing X-rays, and explain its action. Mention some of the properties of X-rays and compare them with those of cathode rays.

## BOTANY

Examiners— $\left\{ \begin{array}{l} \text{DR. EKENDRANATH GHOSH, D.Sc., M.B.} \\ \text{MR. SURENDRACHANDRA BANERJEE, M.A.,} \\ \text{B.Sc., F.L.S.} \\ \text{DR. SAHAYRAM BOSE, M.A., Ph.D.} \\ \text{MR. KALIPADA BISWAS, M.A.} \end{array} \right.$

*Only two questions are to be attempted from EACH part*

*The questions are of equal value*

## PART I

1. Give a drawing of a typical vegetable cell. Label all the parts in detail.

2. How would you differentiate between deposits of calcium carbonate and calcium oxalate in plant cells by micro-chemical tests?

3. What are the different types of vascular bundle? Describe them briefly, and give examples of Indian plants where they are found.

## PART II

1. How do you distinguish between a root and an under-ground stem?
2. Write short notes on:—spike, umbel, capitulum, cyathium, and verticillaster.
3. Describe the various forms of dry dehiscent fruit.

## PART III

1. Describe the life history of *Mucor*.
2. What is alternation of generations? Illustrate it in case of Fern.
3. Describe the vegetative reproductive organ of *Marchantia*.

## PART IV

1. Describe the natural order Apocynaceæ. Give its floral diagram.
2. What do you know of root absorption?
3. What is metabolism? Describe its two phases.

## ZOOLOGY

Examiners—{ DR. EKENDRANATH GHOSH, D.Sc., M.B.  
 DR. SAKHIANATH BOSE.  
 LT.-COL. B. B. SEYMOUR SEWELL, I.M.S.  
 DR. HIMADRIKUMAR MOOKERJEE, D.Sc. (LOND.).  
 M.Sc. (CAL.), D.I.C.

Only two questions are to be attempted in each part

The questions are of equal value

## PART I

1. How will you distinguish between animals and plants?
2. Describe and draw the structure of an animal cell.
3. Discuss the relationship of Zoology to Medical Science.

## PART II

1. Give a detailed account of the life cycle of *Monocystis*.
2. Compare the general structures of Protozoa and Metazoa.
3. Describe the development and function of coelenteron.

## PART III

1. Draw and describe the maxillipeds of the Fresh-water Prawn, and enumerate their functions.
2. Draw and describe the genital organs of a female cock-roach.
3. Describe the mode of respiration in the Fresh-water Mussel.

## PART IV

1. Describe, in detail, the branchial arches of *Ruhu*.
  2. Draw and describe the ventral aspect of the brain of *Guineapig*.
  3. Write short notes on any five of the following :—
    - (a) Alternation of generation.
    - (b) Allantois.
    - (c) Mendel's law.
    - (d) Maturation of the ovum.
    - (e) Parthenogenesis.
    - (f) Loreal shield.
    - (g) Zoa larva.
    - (h) Cochlea.
- 

November, 1931

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## ORGANIC CHEMISTRY

*Examiners*— { L.T.-COL. T. C. BOYD, F.R.C.S.I., D.P.H., I.M.S.  
 MR. P. C. RAY, M.A.  
 MR. BENIMADHAB CHAKRABARTI, B.A., F.C.S.,  
 L.M.S.  
 DR. M. QUDRAT-I-KHUDA, D.Sc.

*The questions are of equal value*

Only three questions are to be attempted in each half.

## FIRST HALF

1. Outline a method of determining the molecular weight of a substance, like chloroform, which is volatile without decomposition.
2. Define and illustrate the following terms :—
  - (a) Homologous series.
  - (b) Isomerism.
  - (c) Hydrolysis.
  - (d) Polymerism.
3. Describe the properties, preparation, and uses of the following :—
  - (a) Acetic ether.
  - (b) Tartar emetic.
  - (c) Resorcinol.
  - (d) Aniline.
4. What do you mean by the term cyanogenetic glucoside? Illustrate how you would test for its possible components.

## SECOND HALF

1. What is optical activity? Discuss the optical isomerism of an organic compound containing two asymmetric carbon atoms.

2. Give an example of each of the following classes of substances. Mention their formula and properties:—

- (a) Amines.
- (b) Amides.
- (c) Amino acids.
- (d) Tribasic acid.

3. What do you understand by the term fermentation? Discuss the application of this process in the preparation of alcohol and lactic acid.

4. How is Cocaine extracted? What are its properties, tests, and uses?

## INORGANIC CHEMISTRY

*Examiners*— $\left\{ \begin{array}{l} \text{LT.-COL. T. C. BAYD, F.R.C.S.I., D.P.H.,} \\ \text{I.M.S.} \\ \text{MR. P. C. RAY, M.A.} \\ \text{MR. BENIMADHAB CHAKRABARTI, B.A., F.C.S.,} \\ \text{L.M.S.} \\ \text{DR. M. QUDRAT-I-KHUDA, D.Sc.} \end{array} \right.$

*The questions are of equal value*

*Only THREE questions are to be attempted in each half*

### FIRST HALF

1. What is a buffer solution? Give examples and explain their importance.

2. What do you consider the most important salts of Mercury? Give the preparation, properties, and tests for any two of them.

3. Describe the properties, preparation, and uses of—

- (a) Boric acid,
- (b) Bleaching powder,
- (c) White lead.
- (d) Lithium chloride.

4. What is coal gas? How is it prepared? What are the important by-products obtained from its manufacture?

### SECOND HALF

1. Write a short note on:—

- (a) Ionisation.
- (b) Dialysis.

2. How is chlorine prepared in the laboratory and on a large scale? What is the action of this gas on—

- (a) Ammonia,
- (b) Sulphuretted hydrogen.
- (c) Sulphur dioxide?

3. Illustrate the meaning of the italicised words:—

*The anhydrous neutral salt insoluble in aqueous solvents was decomposed by an equivalent quantity of a dibasic acid producing some gaseous*

anhydride and a *saturated solution* of an inorganic salt without water of crystallisation but very *deliquescent*.

4. What are the allotropic forms of Phosphorus? How can you prepare these? What are their properties and uses?

## PHYSICS

*Examiners*— $\left\{ \begin{array}{l} \text{MR. T. D. KAR, M.A.} \\ \text{,, NIBARANCHANDRA RAY, M.A.} \\ \text{PROF. D. M. BOSE, M.A., PH.D.} \\ \text{MR. GOPALCHANDRA BHATTACHARYYA, M.Sc.} \end{array} \right.$

*The questions are of equal value*

*Only THREE questions are to be attempted in each half*

### FIRST HALF

1. What is a manometer? Describe some form of manometer suitable for the measurement of pressures slightly above the atmospheric pressure. Why is mercury generally used in manometers? •

2. Define coefficient of viscosity. Explain any method for comparing the coefficients of viscosity of two liquids, stating the formula and giving the precautions to be taken.

3. Explain what you understand by vowel quality. What is its physical characteristic? Give Helmholtz' classification of the principal vowels, explaining in a general way the modifications of the mouth cavity for their production.

4. Define calorific value. Describe any method for finding the calorific value of a solid, deducing the formula and explaining the precautions.

5. Describe the spectroscope and explain its adjustments. Explain how the instrument can be used for spectrum analysis.

### SECOND HALF

6. Deduce the condition of minimum spherical aberration for two lenses separated by a distance. Describe Huyghen's eyepiece and show that it satisfies the above condition. •

7. Explain the construction of Nicol's prism.

You are given two nicols, a slit, and a screen. Explain how you would proceed to test a thin plate for double refraction.

8. Explain the theory and the method of measuring the E.M.F. of a cell by the Potentiometer. How would you modify the arrangement for the measurement of a potential difference of about 1,000 volts? •

9. Describe the construction and the adjustments of a moving coil galvanometer. What law is generally followed by such galvanometers? Make a comparison between a needle and a coil galvanometer.

10. Give a sectional diagram of Ruhmkorff's Induction coil and explain the functions of its parts and its use. How can you arrange to get unidirectional current from it?



## BOTANY

<i>Examiners—</i>	{	DR. SAHAYRAM BOSE, M.A., Ph.D.
		MR. SURENDRACHANDRA BANERJI, M.A., B.Sc.,
		F.L.S.
		„ KALIPADA BISWAS, M.A.
		„ SAILESWAR MUKHERJEE, L.M.S.

*The figures in the margin indicate full marks.*

## PART I

*Answer any two questions from Part I*

1. What is a fruit? Distinguish between a true fruit and a false fruit. Give examples. 25
2. Write a short essay on dispersal of seeds. 25
3. Give the characteristics of the natural order *Leguminosæ*. Distinguish between the sub-orders. 25

## PART II

What is respiration? Distinguish between aërobic and anaërobic respiration. 50

*Or,*

Describe how plants obtain their nitrogenous food. 50

## PART III

Describe sclerenchymatous tissue and its distribution in plants. Give sketches. 50

*Or,*

Describe the histological structure of a *Pine* stem. Give sketches. 50

## PART IV

Describe, in detail, the different modes of reproduction in *Marchantia*. 50

*Or,*

Describe the morphology and the life-history of *Spirogyra*. 50

## ZOOLOGY

Examiners— { DR. EKENDRANATH GHOSH, D.Sc. M.D.  
 „ HIMADRIKUMAR MOOKERJEE, D.Sc. (LOND.),  
 M.Sc. (CAL.), D.I.C.  
 MR. TARAKNATH PODDAR, M.Sc., M.B.  
 DR. BAINI PRASAD, D.Sc.

*The questions are of equal value*

*Only two questions are to be attempted in EACH part*

*Illustrate your answers with diagrams*

## PART I

1. Describe the physical and chemical properties of protoplasm.
2. Give a short account of the mitotic cell division.
3. What do you know about Mendel's Law?

## PART II

1. Compare the methods of reproduction of *Paramecium* and *Vorticella*.
2. Write short notes on:—
  - (a) Parthenogenesis.
  - (b) Coelome.
  - (c) Alternation of generations
  - (d) Monocystis.
  - (e) Cnidoblast.
3. Make a drawing of the transverse section of *Hydra* and label the various structures.

## PART III

1. Describe, in detail, the genital system of *Pheretima*.
2. Describe the vascular system of the fresh-water Prawn.
3. Give a short account of the life history of the fresh-water Mussel.

## PART IV

1. Give a diagram of the arterial system of the toad, and label them.
  2. How would you distinguish a poisonous from a non-poisonous snake?
  3. Describe the formation of allantois in *Gallus*.
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# First M. B. Examination,

April, 1931

## ANATOMY

<i>Examiners—</i>	{	ASST. SURGEON, RAI NANILAL PAN, BAHADUR,
		M.B.
		MR. M. N. BOSE, M.B., C.M. (EDIN.).
		CAPT. HAJI DABIRUDDIN AHMED, K.I.H., O.B.E., L.M.S., B.M.S.
		DR. DINESCHANDRA CHAKRABARTI, F.R.C.S.E.

### FIRST PAPER

*The figures in the margin indicate full marks.*

#### FIRST HALF

1. Describe the "Prostate Gland," giving its chief relations. 65  
How is it developed?  
*Or,*  
Describe the right "Supra-renal Gland," giving its relations.  
How is it developed?
2. Describe the course and distribution of the "Superficial Peroneal Nerve." 60

#### SECOND HALF

1. What is an "Emissary Vein?" Enumerate the emissary veins, noting their course and communications. 65
2. Describe the development of the "Cerebellum." 60

### SECOND PAPER

*The figures in the margin indicate full marks.*

#### FIRST HALF

1. Describe the lymphatics of the "Tongue." 60  
*Or,*  
Describe the lymphatics of the "Urethra."
2. Describe the "Iris." Give its structure and nerve supply. 65

#### SECOND HALF

1. Describe the "Arches of the foot." How are they maintained? 65
2. Describe the Semilunar (Gasserian) Ganglion. Enumerate the structures that you come across in exposing it from the temporal region step by step. 60

## PHYSIOLOGY

**Examiners—** { MR. S. C. MAHALANOBIS, B.Sc., F.R.S.E.  
 MR. M. M. DATTA, L.M.S.  
 LT.-COL. A. C. MACGILCHRIST, M.D., D.Sc.,  
 M.R.C.P., I.M.S.  
 DR. CHARLES REIDS, M.Sc., M.D., D.Sc., Ph.D.

## FIRST PAPER

*The questions are of equal value*

## FIRST HALF

- Write short explanatory notes on :—
  - The mechanism of peristalsis.
  - Essential amino-acids.
  - Cholesterol.
  - Enterokinase.
  - Reflex mechanism of vomiting.
- State your views on the dietetic requirements of a child six months old.

*Or,*

Discuss as far as you can, the possible causes of glycosuria in a young adult. Suggest lines of investigation of such a case.

## SECOND HALF

- What is blood pressure? What does it indicate? Describe briefly the factors which maintain it.
- Describe briefly the functions of elastic fibres in vascular system.

*Or,*

Describe briefly the chemical control of Respiration.

## SECOND PAPER

*The questions are of equal value*

## FIRST HALF

- What different kinds of sensations are involved in the preservation of the erect attitude, and how do they co-operate? Explain the significance of Romberg's sign.

*Or,*

Describe the principal connections of the cerebellum, and explain how they function in synergic control.

- Write short notes on—

- Visual purple;
- Mechanism of accommodation;
- Astigmatism;
- Eustachian tube;
- Circumvallate papillae.

## SECOND HALF

1. What pigments are found in urine? Discuss their origin.
2. Describe the minute structure and functions of the Thyroid Gland.

*Or,*

Describe the minute structure of the Thymus Gland. Discuss its functions.

**November, 1931**

## ANATOMY

**Examiners—** { MR. M. N. BOSE, M.B., C.M. (EDIN.).  
RAI BAHADUR NANILAL PAIN, M.B.  
CAPT. HAJI DABIRUDDIN AHMED, O.B.E.,  
L.M.S., A.I.R.O.  
MR. SATYASAKHA MOITRA, L.M.S., F.R.C.S.  
(EDIN.).

## FIRST PAPER

*The figures in the margin indicate full marks.*

## FIRST HALF

1. Describe the Tympanic Antrum, giving its relations and development. 65
2. Give the origin, insertion, nerve supply, and actions of— 60
  - (a) Superior Constrictor of the Pharynx;
  - (b) Masseter;
  - (c) Supraspinatus;
  - (d) Semimembranous.

## SECOND HALF

1. Describe the development of the Testis and the mechanism of its descent. 65
2. Describe the arterial anastomosis around the elbow joint. 60

*Or,*

Describe the arterial anastomosis around the scapula.

## SECOND PAPER

## FIRST HALF

1. Describe the Gall bladder and the Cystic duct, mentioning specially their blood and lymphatic supply. 60

Or,

Describe the position and relations of the stomach and briefly describe its structure, both naked-eye and microscopic.

2. Describe the lymphatics of the mammary gland. 65

### SECOND HALF

1. Describe the Femoral Canal, stating its position, shape, extent, relations, and contents. 60

2. Describe the origin, course, and distribution of the Phrenic nerve. 65

### PHYSIOLOGY

Examiners— { MR. S. C. MAHALANOBIS, B.Sc., F.R.S.E.  
MR. M. M. DATTA, L.M.S.  
LT.-COL. A. C. MACGILCHRIST, M.D., D.Sc.,  
M.R.C.P., I.M.S.  
PROF. CHARLES REID, M.A., M.D., D.Sc.,  
PH.D.

#### FIRST PAPER

*The questions are of equal value*

#### FIRST HALF

1. Describe the significance of the presence of the following substances in urine:—

(1) Indican, (2) Leucine and Tyrosine, (3) Bile pigments, (4) Acetone, (5) Glucose, and (6) Albumin.

2. Describe the processes involved and the paths traversed in the transport of fat from the alimentary canal to the circulating blood.

Or,

Describe the fate of amino acids absorbed from the intestine.

#### SECOND HALF

1. Discuss the effects of oxygen lack of gradual onset on the respiratory mechanism.

2. Define the output of the heart (circulation rate). Mention briefly one method for its determination in man, and discuss its maintenance in different postures, e.g., recumbent, erect.

### SECOND PAPER

*The questions are of equal value*

#### FIRST HALF

1. Give a short description of the naked-eye structure of the Placenta. What are its functions?

2. Describe the effects of *adrenalin* on (1) blood vessels, (2) heart, (3) lungs, (4) alimentary canal, (5) uterus, and (6) metabolism.

*Or,*

Discuss the effects of Hyperthyroidism on (1) nervous system, (2) metabolism, (3) heart, (4) blood vessels, (5) blood pressure, and (6) eyes.

### SECOND HALF

1. Draw a diagram showing the connections of the Optic thalamus with different parts of the cerebrospinal system.

2. Describe minutely the structure of rods and cones. What are the effects of light on the retina?

*Or,*

Describe the minute structure of the semicircular canals, and explain their functions.

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## Second M. B. Examination,

April, 1931

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### PHARMACOLOGY AND MATERIA MEDICA

Examiners— { DR. P. N. NANDI, M.D.  
CAPT. P. DE.  
DR. S. P. BHATTACHARYYA, M.D.  
MR. BIRENDRANATH GHOSH, L.M.S., F.R.F.P.

*The questions are of equal value  
Only two questions in each half to be answered*

#### FIRST HALF

1. Write explanatory notes on—
  - (a) Chemotherapy;
  - (b) Ionic theory;
  - (c) Drug allergy.
2. Describe the action of drugs on medullary centres.
3. Classify the purgatives, and discuss their general mode of action.

#### SECOND HALF

4. How do the following factors influence the action of a drug?—
  - (a) Chemical composition.
  - (b) Methods of administration.
  - (c) Age and sex.
5. Describe the pharmacological action of cinchona alkaloids, and describe their use in the treatment of malaria.
6. Compare the action of ergot, pituitrin, and adrenalin on uterus.

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### ELEMENTARY BACTERIOLOGY AND PATHOLOGY

Examiners— { LT.-COL. R. KNOWLES, I.M.S.  
DR. T. SUR, M.D.  
MR. CHARUCHANDRA BOSE, B.A., M.B.  
DR. A. C. UKIL, M.D.

Only two questions in each half are to be answered

*The questions are of equal value*

#### FIRST HALF

1. Describe, in detail, the morphology and pathogenesis of malignant tertian malarial parasite in man.



2. How would you identify the causative organism of Cholera Asiatica from human faeces?

3. What are specific granulomata? Enumerate their varieties, and describe the microscopical appearances of any two of them.

### SECOND HALF

4. Describe the morphology and life-history of *Filaria Bancrofti* in man.

5. Discuss briefly the pathology of oedema.

6. Write short notes on the following :—

(a) Eosinophilia.

(b) Melanoma.

(c) Acidosis.

(d) Bacterial toxins.

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November, 1931

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### PHARMACOLOGY AND M. MEDICA

Examiners— { DR. P. N. NANDI, M.D.  
LT.-COL. R. N. CHOPRA, M.A., M.D.  
M.R.C.S., L.R.C.P., D.C.L.  
DR. S. P. BHATTACHARYA, M.D.  
MR. BIRENDRANATH GHOSH, L.M.S., F.R.F.P.

*The questions are of equal value*

*Only two questions in each half to be answered*

### FIRST HALF

1. Name the ferments and enzymes used in medicine and describe fully their therapeutic effects.

2. Describe the effect of drugs, acting on the parasympathetic system, on the cardiac rate output.

3. Write short notes on any two of the following :—

(a) Vitamines.

(b) Insulin.

(c) Thyroxin.

### SECOND HALF

4. Enumerate the counterirritants and describe their mode of action.

5. Classify expectorant drugs. Give their mode of action and doses.

6. Enumerate the drugs which alter the reaction of urine. Describe their therapeutic uses and give their doses.

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**ELEMENTARY BACTERIOLOGY AND PATHOLOGY**

*Examiners*— $\left\{ \begin{array}{l} \text{DR. T. SUR, M.D.} \\ \text{,, SATYENDRANATH RAY, M.B.} \\ \text{MR. CHARUCHANDRA BOSE, B.A., M.B.} \\ \text{,, A. C. UKIL, M.B.} \end{array} \right.$

*The questions are of equal value*

*Answers to be illustrated with diagrams where necessary*

*Only two questions are to be attempted in EACH half*

**FIRST HALF**

1. Describe the mode of formation of thrombi and the effects produced by them.
2. Describe the morphology of *Entamoeba histolytica*. How would you differentiate Amœbic from Bacillary dysentery by laboratory methods?
3. Enumerate the anærobic bacteria pathogenic in man. Mention some of the more important pathological conditions caused by them and how they are produced.

**SECOND HALF**

4. Enumerate the spirochætes pathogenic in man. How would you demonstrate the presence of syphilitic infection by laboratory methods?
  5. Describe the life-history, mode of infection, and pathogenesis of *Ankylostoma Duodenale*.
  6. Write short notes on the following :—
    - (i) Blood changes in Pernicious Anæmia.
    - (ii) Pigments derived from hæmoglobin.
    - (iii) Mycetoma.
    - (iv) Bacteriolysis.
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# Third M. B. Examination, April, 1931

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## MEDICAL JURISPRUDENCE

*Examiners—* { LT.-COL. K. S. THAKUR, I.M.S.  
MAJOR B. G. MALLYA, F.R.C.S.I., I.M.S.  
MR. A. N. SEN, M.B.  
DR. BINAYLAL MAJUMDAR, L.M.S.

*The figures in the margin indicate full marks*

N.B.—Only two questions to be answered from EACH half

### FIRST HALF

1. Describe the phenomena of Rigor Mortis. How would you detect it? What is its medicolegal significance? 125
2. Describe the terms "Throttling" and "Suffocation." What are the post mortem appearances of death due to throttling? 125
3. Describe the signs, symptoms, and treatment of Aconite poisoning. Give the fatal dose and the fatal period. 125

### SECOND HALF

1. The Police have brought only one pelvis and a femur for examination and report as to sex, age, and stature of the individual. Discuss the relevant points in connection with the examination. 125
2. What are the common ways of inducing criminal abortion in this country? Describe the post mortem appearances in a case of criminal abortion, at the sixth month of pregnancy, induced by local application. 125
3. How will you distinguish feigned insanity from real insanity? State what procedure you would adopt in sending an insane to a mental hospital. 125

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## HYGIENE

*Examiners—* { DR. TARAKNATH MAJUMDAR, L.M.S., D.P.H.,  
F.C.S., D.T.M.  
LT.-COL. A. D. STEWART I.M.S.  
DR. R. B. KHAMBATA, D.P.H., M.R.C.P.,  
M.R.C.S.  
LT.-COL. H. SUHRAWARDY, M.D., O.B.E.,  
I.M.S., D.P.H.

*The questions are of equal value*

*Two questions in EACH half to be answered*

### FIRST HALF

1. What in your opinion are the primary factors causing the high incidence of malaria in Bengal? Mention *briefly* the main lines of prevention.

2. What is the action of hypochlorite of lime and potassium permanganate respectively when used for the sterilization of drinking water? How are they used, and in what proportions?

How would you judge of the safety of drinking water heated by these two substances?

3. What are the different ways in which Anthrax may be contracted by man? What are the preventive measures that you would adopt to check the spread of this disease?

### SECOND HALF

4. Tuberculosis is said to be very prevalent in Calcutta and in Bengal. What in your opinion are the causes of this high rate of incidence?

5. What is meant by the term "infectious disease"? At what periods during the course of the disease is a human being "infectious" when suffering from (a) malaria, (b) cholera, (c) enteric fever, (d) dengue fever, (e) diphtheria, (f) cerebro spinal fever, (g) bubonic plague, (h) pneumonic plague?

6. Cholera is said to be "endemic" in Bengal. What does this mean? Why in your opinion does cholera occur every year in Calcutta?

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**November, 1931**

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### FORENSIC MEDICINE

Examiners—	{	MAJOR B. G. MALLA, M.R.C.S., L.R.C.P.,
		F.R.C.S.I., I.M.S.
		L.T.-COL. K. S. THAKUR, M.R.C.S., L.R.C.P.,
		I.M.S.
		MR. A. N. SEN, M.B.
		CAPT. DINESCHANDRA CHAKRABARTI, F.R.C.E.
		(ED.).

*The figures in the margin indicate full marks*

### FIRST HALF

1. Classify Wounds. What information can you gather from 125  
an incised wound situated on the back of a dead body brought to  
you for post-mortem examination?

2. How does death from Suffocation occur? How do the post- 125  
mortem appearances differ according to the cause of death?

*Or,*

What is Infanticide? How is it usually caused? How would  
you determine whether an infant was mature and born alive?

## SECOND HALF

1. How will you determine the approximate time of death from the examination of a dead body? 125

2. How does Carbon dioxide poisoning occur? Describe the signs, symptoms, treatment, and post-mortem appearance of a case of carbon dioxide poisoning. 125

Differentiate it from Carbon monoxide poisoning.

Or,

How does rape cause death? The body of a girl of 10 years who died as a result of rape is brought to you for examination. How would you determine the cause of death and her age?

## HYGIENE

Examiners— { LT.-COL. A. D. STEWART, M.B., CH.D.,  
F.R.C.S.E., D.P.H., D.T.M. & H., I.M.S.  
DR. TARAKNATH MAJUMDAR, L.M.S., D.P.H.,  
D.T.M.  
,, R. B. KHAMBATA, D.P.H., M.R.C.S.,  
L.R.C.P.  
LT.-COL. H. SUHRAWARDY, O.B.E., M.D.,  
F.R.C.S.I., D.P.H.

*The questions are of equal value*

*Only TWO questions to be answered in EACH half*

## FIRST HALF

1. At what seasons of the year in India do anopheline mosquitoes breed most profusely?

What physical conditions in nature favour the propagation of anophelines, and the development of the malarial parasite within the mosquito?

How may this knowledge be used in the prevention of malaria?

2. Explain the following terms:—

(a) Splenic index, (b) Gametocyte, (c) Sporozoite, (d) Zygote, (e) Fever index, (f) Schick reaction, (g) Fomites, (h) Vector, (i) Made soil, (j) Damp-proof course.

3. How would you disinfect a tank 40 feet long, 20 feet broad, and 10 feet deep, and a well 4 feet in diameter and 20 feet deep? What chemicals would you use and in what strength?

## SECOND HALF

4. What is the maximum seasonal incidence in India of (a) Cholera, (b) Small-pox, (c) Malaria? How may these facts be applied in prevention?

5. Cholera has broken out in an epidemic form in a small town. What preventive measures would you take, as Medical Officer of Health, to check the epidemic?

6. What part does the house fly play in spreading disease in India?

Describe shortly its life history and indicate measures to destroy (a) the adult fly, (b) in the larval stage.

# Final M.B. Examination,

## April, 1931

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### MEDICINE

*Examiners—* { DR. B. C. ROY, B.A., M.D., F.R.C.S.,  
M.R.C.P.  
RAI BAHADUR DR. U. N. BRAHMACHARY, M.A.,  
M.D., PH.D.  
LT.-COL. J. D. SANDES I.M.S., M.R.C.P.I.,  
B.A.O.  
DR. U. P. BOSE, M.B., M.R.C.P.  
MAJOR J. C. DE, I.M.S., M.B., L.R.C.P.,  
M.R.C.S  
DR. HARIHAR GANGULI M.D.

### FIRST PAPER

*The questions are of equal value*

#### FIRST HALF

1. Mention and describe the various ways in which syphilis may affect the heart and its blood vessels. How will you treat cardiac syphilis?

*Or,*

Name the various types of muscular atrophy. Describe, in detail, the ætiology and symptoms of pseudo-hypertrophic muscular dystrophy.

2. Give the signs, symptoms, differential diagnosis, and treatment of kala azar in the acute stage.

#### SECOND HALF

What is the significance and what are the causes of albuminuria? Give the differential diagnosis of these causes.

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### SECOND PAPER

*The questions are of equal value*

#### FIRST HALF

1. Give a classification of purpura.  
Discuss the pathogenesis of idiopathic purpura.  
Give the treatment of purpura hæmorrhagica.

Or,

Describe the signs, symptoms, and complications of gastric and duodenal ulcer and give the treatment.

2. Give the pathogenesis, signs, symptoms, and treatment of rickets.

### SECOND HALF

Discuss the diagnosis including the differential diagnosis of fluid in the pleural cavity.

### SURGERY

<i>Examiners—</i>	{	DR. MRIGENDRALAL MITTER, M.D., F.R.C.S.
		„ LALITMOHAN BANERJEE, M.S., F.R.C.S.
		„ S. K. MUKHERJEE, F.R.C.S., D.O.,
		D.O.M.S.
		LT.-COL. K. K. CHATTERJEE, F.R.C.S.
		LT.-COL. W. L. HARNETT, M.A., M.D. (Cam.),
		F.R.C.S., I.M.S
		MAJOR S. N. MUKHERJEE, F.R.C.S., I.M.S.

### FIRST PAPER

*The questions are of equal value*

#### FIRST HALF

1. Give the various methods of producing surgical anæsthesia. What are the indications for and against the employment of each method?

2. Mention the cystic swellings which may be met with in connection with the female breast. Describe briefly the pathology and clinical features of each.

#### SECOND HALF

*Either Question 4 or 5 must be answered*

3. Give the origin, course, and distribution of the ulnar nerve. Describe the clinical signs produced by injury to the nerve at various levels, and explain how they are caused.

4. Describe the pathological anatomy and clinical features of congenital Talipes Equino-Varus. Give the differential diagnosis from other conditions which resemble it.

Or,

5. What are the causes of ankylosis of the knee joint? Give the differential diagnosis of each.

### SECOND PAPER

*The questions are of equal value*

*Either Question 4 or 5 must be answered*

1. How would you proceed to confirm your diagnosis in a case of suspected simple glaucoma? Describe, in detail, a suitable operation for such a case.

2. What pathological changes occur in the substance of the brain as a result of recent traumatic intra-cranial hæmorrhage? Mention briefly how these changes affect the prognosis.

3. Describe, in ascending sequence, the complications of gonorrhœa in its acute, sub-acute, and chronic stages in the male. How would you diagnose and treat a case of unilateral gonorrhœal epididymitis?

4. Mention the complications of chronic gastric ulcer. How would you treat each?

Or,

5. What are the causes of hæmorrhage from the rectum? Describe how you would investigate a case, indicating the deductions you would draw from each clinical sign observed.

### MIDWIFERY

Examiners— { DR. KEDARNATH DAS, C.I.E., M.D.  
 „ SATINATH BAGCHI, M.Sc., M.B., M.O.  
 „ NARENDRANATH ROSE, L.M.S.  
 „ BAMANDAS MUKHERJEE, L.M.S.  
 MAJOR P. FLEMING GOW, D.S.O., M.B., CH.B.,  
 I.M.S.  
 DR. J. N. DAS, L.M.S.

### FIRST PAPER

*The figures in the margin indicate full marks*

#### FIRST HALF

1. What are the indications for termination of pregnancy in a case of Hyperemesis gravidarum? 50
2. Describe the surgical technique for the removal of a large ovarian cyst. 75

#### SECOND HALF

3. Describe the pathology of vesicular or hydatidiform mole, and mention its bearing on modern treatment of this condition. 60
4. Discuss the treatment of menorrhagia in a young unmarried girl. 65

### SECOND PAPER

*The figures in the margin indicate full marks*

1. A primipara has been in labour for twenty hours, membranes have ruptured, os uteri three quarters dilated, head is engaged, the vertex presenting in the pelvic brim. How would you proceed to deal with the case? 65



2. What are the diagnostic points in a case of congenital syphilis in a new-born baby? What treatment would you adopt in such a case? 60

Or,

What are the causes of vomiting in a new-born baby? How would you treat such a case?

3. Define (a) Diagonal Conjugate; (b) Attitude of the Fœtus; (c) Funnel Pelvis; (d) Test labour. 60

4. What would you do if the placenta is not born within an hour after the birth of the child? 65

November, 1931

## MEDICINE

<i>Examiners—</i>	{	RAI BAHADUR DR. U. N. BRAHMACHARI, M.A.,
		M.D., Ph.D.
		DR. B. C. ROY, B.A., M.D., F.R.C.S.,
		M.R.C.P.
		LT.-COL. J. B. SANDES, M.D., M.R.C.P.I.,
		B.A.O., I.M.S.
		MAJOR J. C. DE, M.B., M.R.C.S., L.R.C.P.,
		I.M.S.
		DR. HARIHAR GANGULI, M.D.
		,, U. P. BOSE, M.D., M.R.C.P.

## FIRST PAPER

*The questions are of equal value*

### FIRST HALF

1. Give the signs and symptoms of a typical case of Asiatic Cholera. Give its treatment in the stage of re-action.

2. Give the signs, symptoms, and differential diagnosis of Acute Pancreatitis. Give its etiology.

### SECOND HALF

*(Only ONE question in this half is to be attempted)*

1. Give the differential diagnosis of a swelling in the lower part of the right side of the chest.

Or,

2. How will you investigate a case with pain in the Right Iliac Fossa? Give the possible causes and the differential diagnosis.

## SECOND PAPER

## FIRST HALF

1. Give the most important findings which will lead to a diagnosis of early Tuberculosis of the Lungs. Give an outline of the principles that should guide you in the treatment of *such* a case.

2. Give the signs, symptoms, and diagnosis of Multiple Peripheral Neuritis. Give the principles of treatment.

## SECOND HALF

(Only ONE question in this half is to be attempted)

1. Give the signs, symptoms, and treatment of Myxœdema.

Or,

2. What are the various types of Circulatory failure? How would you diagnose the different forms and give the treatment of each form?

## SURGERY

Examiners— { LT. W. L. HARNETT, M.A., M.D., (CAM.),  
F.R.C.S., I.M.S.  
DR. MRIGENDRALAL MITRA, M.D., F.R.C.S.  
,, LALITMOHAN BANERJEE, M.S., F.R.C.S.  
,, S. K. MUKHERJEE, F.R.C.S., D.O.,  
D.O.M.S.  
LT.-COL. E. W. O'G. FIRWAN, M.B., B.C.H.,  
B.A.O., F.R.C.S.I., I.M.S.  
MAJOR S. N. MUKHERJEE, F.R.C.S. (E.), I.M.S..

## FIRST PAPER

*The questions are of equal value*

## FIRST HALF

1. In what forms may carcinoma occur in the tongue? Give the clinical characters, differential diagnosis, and treatment (operative details not required).

2. What may be the causes of delayed union and non-union of a simple fracture of the middle third of the humerus?

## SECOND HALF

*Either Question 4 or 5 must be answered*

3. Describe the axillary space with special reference to the arrangement of lymphatic glands, giving their afferent and efferent connections.

4. Enumerate the cystic swellings which may be met with in the middle line of the neck. Give briefly the pathology and clinical features of each.

*Or,*

5. Describe the varieties of malignant tumours which may occur in bone, giving their pathology and clinical features.

## SECOND PAPER

*The questions are of equal value*

*Either Question 4 or 5 must be answered*

1. What do you understand by the term hypopyon ulcer (ulcer serpens) of the cornea? How is it caused and how would you treat a case?

2. Enumerate the different degrees of burns. What are the dangers and complications? How would you treat a case of extensive burns in a child? On what does the prognosis depend?

3. Give the causes of hæmaturia. Describe the investigation of a case, noting the conclusions to be drawn from each finding.

4. What are the complications which may be met with in inguinal hernia? How would you differentiate them?

*Or,*

5. What are the posterior dislocations of the hip joint? Describe the mechanism of their production. What difficulties may be met with in their reduction?

## MIDWIFERY

<i>Examiners—</i>	{	DR. KEDARNATH DAS, C.I.E., M.D.
		LT.-COL. V. B. GREEN ARMYTAGE, M.R.C.P.,
		M.D., F.C.O.G., I.M.S.
		MR. NARENDRANATH BASU, L.M.S.
		„ SATINATH BAGCHI, M.Sc., M.B., M.O.
		MAJOR P. FLEMING GOW, D.S.O., M.B., CH.B.,
		D.P.H., I.M.S.
		MR. J. N. DAS, L.M.S.

## FIRST PAPER

*The figures in the margin indicate full marks*

### FIRST HALF

1. Describe the menstrual cycle. 60

2. What are the dangers attending pregnancy and labour in a patient with valvular disease of the heart? Describe the management of a case of labour complicated by mitral stenosis. 65

## SECOND HALF

3. Describe the naked eye anatomy of the pelvic organs and the pregnant uterus with its contents at the twelfth week of gestation. 60

4. What risks does a pregnant woman run if she contracts syphilis or gonorrhœa? Describe shortly the treatment of each condition. 65

Or,

What pathological conditions cause pruritus of the vulva? Give the appropriate treatment.

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 SECOND PAPER

*The figures in the margin indicate full marks*

## FIRST HALF

1. Describe the mechanism of dilatation of the cervix during labour. What are the causes of slow dilatation of the cervix? 65

2. How do you diagnose and treat a case of inevitable abortion? 60

## SECOND HALF

3. Describe, in detail, the mode of delivery of the after-coming head in an uncomplicated breech presentation. 65

4. Describe any operative procedure you have seen for the radical cure of complete prolapse of the uterus. 60

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# I. E. Examination, 1931

## MATHEMATICS.

(COMPUTATIONS, MENSURATION, AND STATICS)

*Examiner*—PROF. J. M. BOSE, M.A., B.Sc.

### FIRST HALF

*The questions are of equal value*

*Answer ANY THREE questions.*

1. Estimate by Contracted methods

(1)  $273.50618 \times 26.02471$  to 2 decimal places.

(2)  $\frac{0.01678 \times 0.00792}{0.06378}$  to 3 significant figures.

Or,

$$\text{If } V^2 = 1.8L \frac{\frac{6.3}{2}D - e}{\frac{6.3}{2}D + e} \frac{-e}{-\frac{6.3}{2}D}.$$

Find  $V^2$  when  $d=40'$  and  $L=315'$ .

2. The side faces of a right pyramid are isosceles triangles with equal angles ( $\alpha$ ) and each side face makes angle  $\beta$  with the base. Find the angle which each slopping side makes with the base.

Or,

The angle  $A$  of a triangle falls short of a right angle by a small angle of circular measure  $\alpha$ . Prove that the side  $c$  exceeds  $\sqrt{a^2 + b^2}$  by  $ba$  approximately.

3. (1) Find graphically the smallest positive angle which will satisfy  $\tan \alpha = 2$ .

(2) A weight oscillates up and down at the end of an elastic string. Its depth below the point of suspension  $t$  sec.s after starting is  $(12 + 3 \cos 2\pi t)$  inches. At what times will its depth be (i) 15, (ii) 9 inches?

4. Solve the triangle

$$a=68.2, \quad b=91.3, \quad A=38^\circ 14'.$$

What is the difference in area of the two triangles satisfying the given conditions?

## SECOND HALF

*Answer ANY THREE questions.*

1. If three forces acting at a point be represented in magnitude and direction by the sides of a triangle, taken in order, they will be in equilibrium. Establish.

Decompose a force, whose magnitude and line of action are given, into two equal forces passing through two given points, giving a geometrical construction (i) when the two points are on the same side of the force, (ii) when they are on opposite sides.

2. Find the resultant of two unequal unlike parallel forces acting upon a rigid body.

A portmanteau, of length 3 feet and height 2 feet and whose centre of gravity is at its centre of figure, is carried upstairs by two men who hold it by the front and back edges of its lower face. If this be inclined at an angle of  $30^\circ$  to the horizontal, and the weight of the portmanteau be 1 cwt., find how much of the weight each supports.

3. Prove that the algebraic sum of the moments of any two forces about any point in their plane is equal to the moment of their resultant about the same point. (Consider the case where the forces meet in a point.)

At what height from the base of a pillar must the end of a rope of given length be fixed so that a man standing on the ground and pulling at its other end with a given force may have the greatest tendency to make the pillar over-turn?

4. Write down the usual conditions of equilibrium (necessary and sufficient of any system of forces acting in one plane upon a rigid body.

A uniform beam, of length  $2a$ , rests in equilibrium, with one end resting against a smooth vertical wall and with a point of its length resting upon a smooth horizontal rod, which is parallel to the wall and at a distance  $b$  from it; shew that the inclination of the beam to the vertical is

$$\sin^{-1} \left( \frac{b}{a} \right)^{\frac{1}{3}}$$

5. Enumerate the three classes of levers. Give illustrations.

If two weights balance about a fixed fulcrum, at the extremities of a straight lever, in any position inclined to the vertical, they will balance in any other position. Establish.

## (DIFFERENTIAL CALCULUS AND PLANE GEOMETRY)

*Examiner—PROF. S. C. GHOSH, M.A.*

## FIRST HALF

*The questions are of equal value*

*Not more than FOUR questions to be attempted.*

1. If  $S$  be the space described by a moving point at any time  $t$  what is the (i) geometrical, (ii) dynamical meaning of  $\frac{ds}{dt}$ ? If  $v$  represent the value of  $\frac{ds}{dt}$

at any instant, interpret the meaning of  $\frac{d^2s}{dt^2}$  and  $v \frac{dv}{ds}$ . Explain your result graphically.

2. Differentiate from first principles

$\tan x$  and  $a^x$

Expand  $\tan^{-1} x$  in powers of  $x$ .

Differentiate the following with respect to  $x$

$$\log_{10} (\log_e \cos x), \frac{\sin x}{\sqrt{1-x^2}}, x^x.$$

3. Evaluate the following :—

$$\int dx \sqrt{x}, \int \frac{dx}{\sqrt{(x-1)(x-2)}}, \int x e^{x^2} dx, \int \frac{dx}{\cos x}.$$

4. Sketch the graph of :—

$$y = x e^{-x}$$

accurately on graph paper from  $x=0$  to  $x=1$  and find by any method the area included between the curve, the ordinate at  $x=1$  and the  $x$  axis.

Estimate roughly the shape of the curve when  $x$  is very large on the positive side.

5. A cable weighing 5 lb. per foot is strained to a tension of 60 lb. and hangs freely from two points  $A$  and  $B$  in the same horizontal line, the sag being 33.1464 ft. Taking the form of the cable to be same as the curve

$$y = \frac{1}{2}c \left( e^{\frac{x}{c}} + e^{-\frac{x}{c}} \right).$$

draw the form assumed by the cable and estimate the tension at 12 ft. from the centre.

## SECOND HALF

Answer ANY THREE questions

1. Show that any equation of the first degree in  $x$  and  $y$  always represents a straight line.

Find the equation to the straight line which passes through the point  $(4, -5)$  and which is parallel to the straight line

$$3x + 4y + 5 = 0.$$

2. Show that the straight line

$$y = mx + a \sqrt{1+m^2}$$

is always a tangent to the circle  $x^2 + y^2 = a^2$ .

Find the equation to the circle whose centre is at the point  $(a, b)$  and which passes through the origin and prove that the equation of the tangent at the origin is  $ax + by = 0$ .

3. Show that the radical axes of three circles, taken in pairs, meet in a point.

Find the general equation of all circles any pair of which have the same radical axis as the circles

$$x^2 + y^2 = 4 \text{ and } x^2 + y^2 + 2x + 4y = 6.$$

4. Prove that the middle points of a system of parallel chords of a parabola all lie on a straight line which is parallel to the axis.

Find the equation to the chord of the parabola  $y^2 = 4ax$  which is bisected at the point  $(h, k)$ .

5. Find the locus of the point of intersection of tangents to an ellipse which meet at right angles.

If  $sy$  and  $s'y'$  be the perpendiculars from the foci upon the tangent at any point  $P$  of the ellipse, shew that  $y$  and  $y'$  lie on the auxiliary circle.

## GENERAL CHEMISTRY

Examiners—{ PROF. N. N. SEN, M.Sc., A.I.E., A.R.S.N.  
PROF. R. N. SEN, M.A., M.Sc.

*Not more than THREE questions are to be attempted in EACH half*

*The questions are of equal value*

### FIRST HALF

1. Explain the meaning of the terms : ionisation, electrolysis, colloidal solution, fractional distillation, and calcination. Give examples in illustration of your answer.

2. State what products under what conditions can be obtained from mixtures of (a) coke and sodium sulphate, (b) sand, coke, and salt, (c) chalk and clay, (d) coke and steam. State the properties and uses of the chief product formed in each case.

3. How is lead obtained from its ores and how is it purified? Name and give approximate compositions of three industrial alloys of lead, and state how you would proceed to detect the metal in these alloys.

4. Explain fully what you understand by (1) calorific value in calories, (2) calorific value in British Thermal Units, and (3) evaporative power of a fuel.

One hundredweight of a coal having a calorific value of 7,600 calories is burnt in a boiler. Assuming that seventy per cent. of the heat is transmitted to the boiler, calculate the total quantity of water that can be evaporated at  $212^\circ\text{F}$ . [Latent heat of evaporation of water = 966 B.Th.U.]

### SECOND HALF

5. Write explanatory notes on the following with illustrations :—

Allotropy, Eutectic point, Exothermic and Endothermic compounds, Explosion.

6. Give the composition, and briefly describe the manufacture, of (a) Plaster of Paris, (b) Potash alum, (c) Potassium dichromate, (d) Permanganate of potash.

7. Write what you know about Goldschmidt's Thermit process, Alloys of copper, Temporary and Permanent hardness in water, Producer gas.

8. How are the following substances prepared and what are their uses?—

Superphosphate of lime, Calcium cyanamide, Yellow prussiate of potash, Prussian blue, Red lead.



## GENERAL CHEMISTRY.

## PRACTICAL PAPER.

Examiners— { PROF. N. N. SEN, M.Sc., A.I.E., A.R.S.N.  
 { PROF. R. N. SEN, M.A., M.Sc.

[N. B.—The number of the mixture should be carefully entered  
 in the answer book.]

1. Make a complete qualitative analysis of the given mixture which may contain not more than four inorganic radicals, basic and acidic.
2. Submit your practical note-book.

## PHYSICS

Examiners— { PROF. A. C. CHAKRABARTI, M.Sc., M.A. (CANTAB.)  
 { DR. S. DUTTA, D.Sc.

Only THREE questions to be attempted from EACH half.  
 The questions are of equal value.

## FIRST HALF

1. Discuss briefly the principal errors of a mercurial thermometer and the means used to reduce them.
2. Explain the difference between a permanent gas and a vapour.  
 Describe Regnault's method of finding the coefficient of expansion of a gas at constant pressure. Discuss the necessary corrections.
3. Define specific heat of a gas at constant pressure and at constant volume. Which of these is greater, and why? How would you measure one of them accurately?
4. Define magnetic potential and deduce an expression for the intensity of the field at any point.  
 When the magnetic potential at every point is known, how will you plot the lines of force?

## SECOND HALF

5. Draw a diagram of Ruhmkorff's coil and explain the importance and design of the core and the condenser.
6. State Faraday's laws of Electrolysis. Show that the facts of electrolysis suggest that there is a natural unit of electricity.  
 The electro-chemical equivalent of Hydrogen is 0.000104. How much zinc will be consumed in a battery per year if it is used to work a telephone circuit of resistance 1000 ohms for half an hour every day? The battery consists of 10 Leclanché cells in series, each of 1.5 volts.
7. Describe, giving its theory, the Huyghen's eyepiece. What are its merits and defects?
8. Define the nodal and principal points of a thick lens. What are their optical properties?  
 Find the positions of the nodal, principal, and focal points when a glass sphere is used as a converging lens.

## MATHEMATICS

## CALCULUS AND PLANE GEOMETRY

Examiner—PROF. J. M. BOSE, M.A., B.Sc.

The questions are of equal value

[Not more than THREE questions to be attempted from EACH half.]

## FIRST HALF

1. Find the  $n$ th differential coefficient of the following :—

$$\frac{x}{(x-a)(x-b)}, \quad \frac{1}{x^2+a^2}, \quad e^{ax} \cos (bx+c).$$

2. If  $y = e^{a \sin^{-1} x}$ ,

prove that  $(1-x^2) \frac{d^2 y}{dx^2} - x \frac{dy}{dx} = a^2 y$ .

Prove by expanding the first differential coefficient of  $\tan^{-1} x$  and comparing coefficients that

$$\tan^{-1} x = n\pi + x - \frac{x^3}{3} + \frac{x^5}{5} \dots\dots$$

3. A curve is referred to the tangent and normal at the origin as axes of  $x$  and  $y$  respectively.

Prove that its radius of curvature at the origin is

$$L \frac{y^2}{2x}$$

when  $x$  and  $y$  both become evanescent.

Find the radii of curvature at the origin of

$$y^2 - 3xy - 4x^3 + x^3 + x^3 y + y^3 = 0.$$

4. If  $a < b$  and if  $G$  is the (algebraically) greatest and  $L$  (algebraically) least value of  $F(x)$  within the interval  $(a, b)$  prove that

$$\int_a^b F(x) dx \text{ lies between } G(b-a) \text{ and } L(b-a).$$

Prove that

$$\int_0^1 \frac{dx}{\sqrt{4-3x+x^3}} < \int_0^1 \frac{dx}{\sqrt{4-3x}} \text{ but } > \int_0^1 \frac{3x+8}{16} dx,$$

i.e.,  $< \frac{3}{2}$  but  $> \frac{1}{2}$ .

5. Evaluate the following :—

$$\int_0^1 \log x dx \int_0^{\frac{\pi}{2}} \frac{\cos^3 x \sin x}{\sqrt{1+e^2 \cos^2 x}} dx \int_0^\pi \frac{d\theta}{a+b \cos \theta}$$

Prove without intergration

$$\int_0^{\frac{\pi}{2}} \log \tan x dx = 0.$$

## SECOND HALF

1. (a) Show that the area of the triangle whose vertices are  $(x_1, y_1)$ ,  $(x_2, y_2)$ , and  $(x_3, y_3)$  is

$$\frac{1}{2} \begin{vmatrix} x_1 & y_1 & 1 \\ x_2 & y_2 & 1 \\ x_3 & y_3 & 1 \end{vmatrix}.$$

Hence or otherwise prove that (2, 3), (4, 5), and (6, 7) are collinear.

- (b) Find the equation to the straight line passing through (1, 1) and the intersection of

$$12x + 13y + 2 = 0 \text{ and } 25x + 16y - 50 = 0.$$

2. (a) Find the polar of a given point with respect to a given circle and show that the polar is perpendicular to the straight line joining the centre to the given point.

- (b) Find the length of the tangent from (3, 0) to the circle

$$x^2 + y^2 + 5x - 8 = 0.$$

3. Show that  $y = mx + \frac{a}{m}$  is a tangent to the parabola  $y^2 = 4ax$ .

Find the locus of the point of intersection of two tangents to a parabola, which are (i) perpendicular, (ii) inclined to each other at  $45^\circ$ .

4. Trace the conic

$$\frac{x^2}{9} + \frac{y^2}{4} - \frac{2}{3}x - y + 1 = 0,$$

and find its latus rectum and eccentricity.

Find also the diameter of the conic, conjugate to

$$2x - 3y = 0.$$

## MATHEMATICS

## (DYNAMICS AND APPLIED MECHANICS)

Examiner—PROF. S. P. DAS, M.A.

*The questions are of equal value.*

*Not more than THREE questions to be attempted from EACH group.*

## FIRST HALF

1. Find an expression for the thrust on a plane lamina immersed vertically in a heavy homogeneous liquid.

A rectangle is immersed in a heavy homogeneous liquid with one side in the surface. Show how to draw a horizontal line dividing it into two parts, the thrusts, on which are equal.

2. What do you understand by the Force of Buoyancy and the Centre of Buoyancy? Find the conditions of equilibrium satisfied by a solid floating freely in a fluid.

A ball weighing 300 grammes floats in mercury of density 13.6 with  $\frac{3}{4}$  of its volume immersed. Find the density and volume of the ball.

3. Enunciate and fully explain the Second Law of Motion.

A force of 30 dynes acts upon a mass of 50 grammes initially at rest. What velocity does it generate in  $2\frac{1}{2}$  seconds?

4. Either,

State the principle of conservation of momentum and deduce it from the Laws of Motion.

A 30 lb. shot is fired from a 3-ton gun with a velocity of 1,120 ft./sec.; find the impulse of the explosion and the velocity of recoil of the gun.

Or,

Show that the path of a projectile in vacuo is a parabola. If the velocity of projection be  $u$  at an angle  $\alpha$  with the horizon, find the range on the horizontal plane. After what time does the projectile move in a direction perpendicular to the direction of projection?

### SECOND HALF

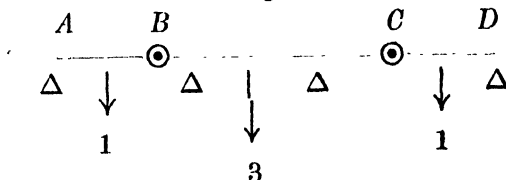
1. Define Working stress. Young's modulus, and Poisson's ratio.

A steel bar of rectangular cross section  $2" \times \frac{1}{2}"$  is subjected to a pull of 10 tons in the direction of its length. Taking Young's modulus to be 12,500 tons per square inch and Poisson's ratio  $= \frac{1}{10}$ , find decrease in length of the sides of the cross section and the percentage decrease of the area of section.

2. Define bending moment and shearing force and prove that the shearing force vanishes at all points where the bending moment is greatest or least.

Three beams  $AB, BC, CD$  are joined together at  $B$  and  $C$  as shown in the figure. They carry loads at the centres as indicated.

Construct the diagram of bending moments.



3. A beam, 80 ft. span and weighing one ton per foot run, carries a rolling load of two tons per foot run, and the rolling load covers a length of 10 ft. Draw roughly to scale the curves of positive and negative shearing force as the load crosses over.

4. A concrete foundation 4 feet wide has to carry wall which supports 8 tons per lineal foot including its own weight. Find the depth of the foundation if the concrete weighs 1 cwt. per cubic foot; weight of the earth  $1\frac{1}{2}$  cwt. per cubic foot. Angle of repose  $30^\circ$ .

### APPLIED PHYSICS

Examiners—{ PROF. H. C. CHAKRABARTI, M.Sc., M.A. (CANTAB.)  
PROF. D. M. BOSE, M.A., B.Sc., Ph.D.

Only THREE questions to be attempted from each half

The questions are of equal value

### FIRST HALF

1. Two large parallel plates are separated by a distance  $d$ . Calculate the change in capacity per unit area if a slab of dielectric constant  $k$  and thickness  $\frac{d}{2}$  is introduced midway between the two plates. Establish the formula you use.

FIG. 1.

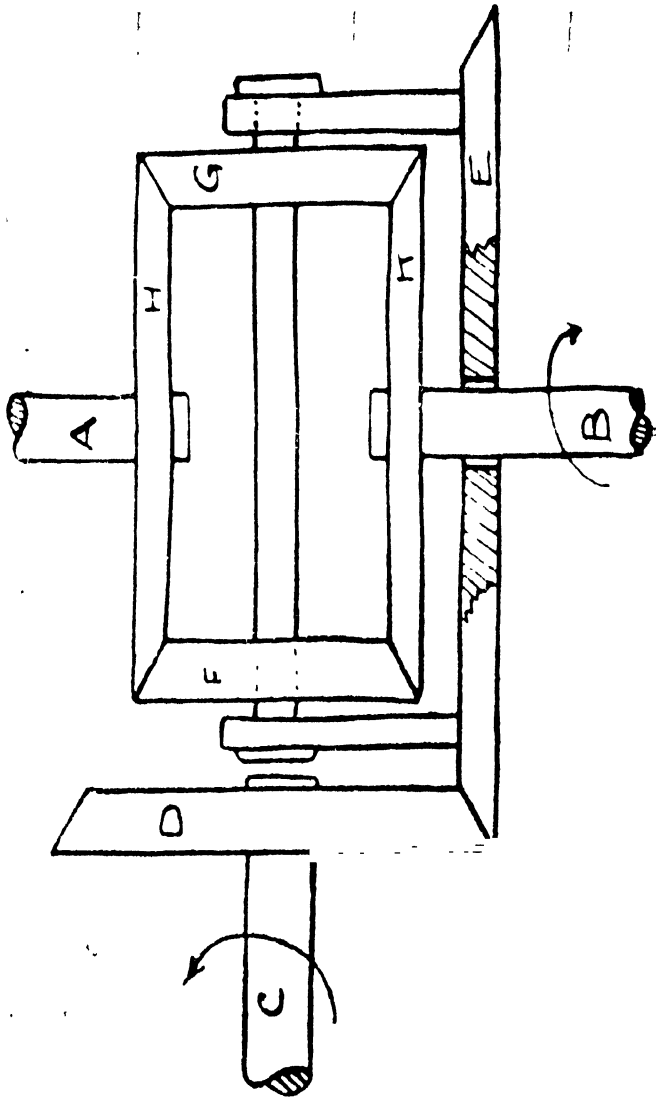
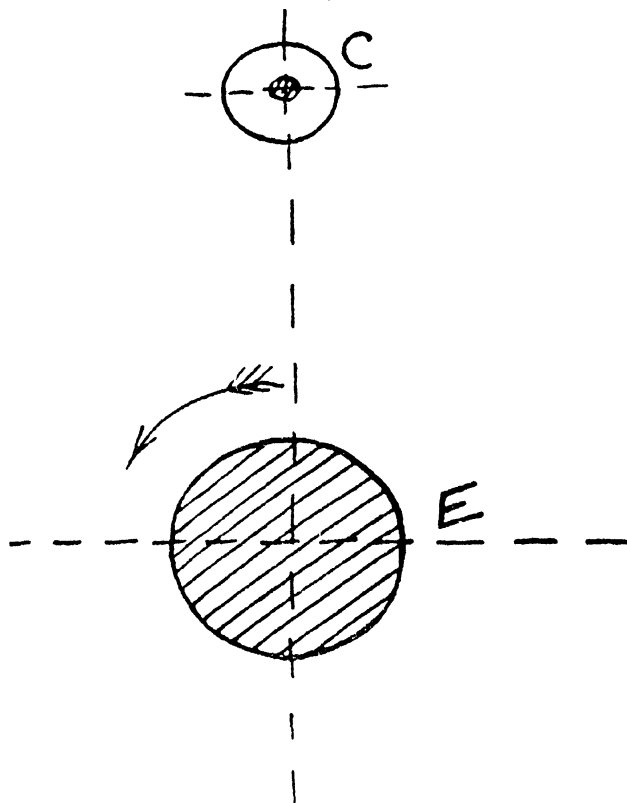


FIG. 2.



centre of the shaft. *C* is to remain at the bottom of its stroke for  $\frac{1}{4}$  sec., then to rise to the top with constant velocity in  $\frac{1}{4}$  sec.; to remain at the top for  $\frac{1}{4}$  sec. and then to fall to its bottom position with constant velocity in  $\frac{1}{4}$  sec. Outline the required shape of the cam plate. Draw the velocity-time diagram and the displacement-time diagram, for the centre of the roller. The travel to and fro of the roller is 1". The minimum distance from the edge of the cam to the edge of the shaft is to be  $\frac{1}{2}$ ".

## ELECTRICAL ENGINEERING

## FIRST HALF

Examiners—{ PROF. B. C. GUPTA, F.A.I.E.  
MR. J. D. CHAUDHURI, B.Sc.,

*The questions are of equal value.*

1. (i) What is the use of a commutator in (a) D.C. dynamo, (b) D.C. motor?
- (ii) Why is it necessary to produce sparkless commutation and how is this effected in (a) dynamo, (b) motor?

(iii) Give by a suitable sketch the theory of the act of sparkless commutation.

2. Enumerate the principal sources of waste of power in an electric motor.

Current is supplied to a series motor at 100 volts, the resistance of the circuit being .5 ohm. Determine the power expended in turning the armature when the current is 10 amperes. Determine the current when the power thus expended is a maximum. Compare the values of the electric efficiency in the two cases.

3. (i) What are Fleming's right and left hand rules? (ii) How do you change the direction of rotation (a) series motor, (b) shunt motor, (c) compound motor? (iii) Develop the equation for H.P. and torque in a bipolar motor, using British units. (iv) What happens in a shunt motor when the field is either strengthened or weakened? Explain fully.

4. (i) Write a short sketch on (a) street illumination, (b) illumination of a large assembly hall, (c) domestic lighting.

(ii) Is incandescent lighting likely to completely supersede arc lighting in the near future? Give your reasons.

## SECOND HALF

*The questions are of equal value*

*Answer THREE questions only*

1. (a) Represent the following E.M.F.'S by vectors, showing the phase relations between them. Take  $E_1$  horizontally and mark the leading vectors if any "lead"

$$(1) E_1 = 100 \sin \omega t,$$

$$(2) E_2 = 50 \sin \left( \omega t + \frac{\pi}{4} \right),$$

$$(3) E_3 = 60 \cos \omega t,$$

$$(4) E_4 = 20 \sin \left( \omega t - \frac{\pi}{3} \right).$$

(b) Two alternating vectors of the same period, and of amplitude 10 and 8 respectively, are found at a certain instant to have the values +5 and -4 respectively and .001 second later their values are +10 and +4.

Find (a) the angle of phase difference,

(b) the period, assuming this to be greater than .001 second.

2. (a) Define Inductance.

(b) Two bobbins of the same size and shape are wound with different sizes of wire, so that one of them contains thrice as many turns as the other. The inductance of the bobbin with the smaller number of turns is found to be .008 henry. Find the energy in foot-pounds stored up in the magnetic field of the other bobbin when conveying a current of two amperes.

3. (a) Explain the production of Alternating Current with the help of a shuttle armature used in a cycle lighting set. Show by a diagram the flux distribution of such an armature.

(b) The diameter of the armature of a certain frame is 25" and its length 11". The flux density in gap is 60,000 lines per sq. in. How many conductors must we have in series in order to generate 500 volts, when the machine is running at 900 revs. per min.

4. (a) Define power factor and explain the difference between A.C. and D.C. circuits, discussing how they are affected by power factor.

(b) A 10 H.P. single-phase motor works off a 200 volts supply. Its full load efficiency is .85 and power-factor .75. Calculate the full load current.

## MATERIALS OF CONSTRUCTION

*The questions are of equal value.*

## FIRST HALF

Examiners— { MR. R. R. GHOSH B.A., B.E. (CAL.)  
RAI BAHADUR CHUNILAL SARKAR, B.E.

*Only FOUR questions to be attempted from this half.*

1. Briefly describe Bull's patent trench kiln, touching on each of the under-mentioned points :—

- (a) The construction of the kiln ;
- (b) Loading ;
- (c) Firing ;
- (d) The working of the dampers and chimneys.

2. How would you test a stone for building purposes? Describe the usual method adopted for quarrying a sedimentary rock.

3. What is Portland Cement? To what tests would you subject a consignment of Portland Cement before using it.

4. Describe the process by which wrought iron is generally prepared from pig iron.

5. Explain the terms : base, vehicle, drier, solvent, and pigment. Name some of the materials under each head.

Give general description of applying paint on new doors.

## SECOND HALF

*Only FOUR questions to be answered.*

1. What are the chief characteristics of building stones obtained from the sandstone and from limestone formations? State where they are found in India. What is quarry sap?

2. Give the composition of good brick earth. On what does the colour of bricks depend? How can bright-red bricks be obtained?

3. Write short notes, explaining what you understand by lime punning, sand rubbing, stucco plaster, distemper, terracotta, and encaustic tiles.

4. Give sketches of tools ordinarily used by the plasterers in Bengal.

5. Describe the process known as Dr. Angus Smith's for coating cast iron pipes. Give particularly the composition and the mode of application.

## DETAILS OF CONSTRUCTION

Examiners— { MR. P. N. BANERJEE, M.A. A.M.I.E.  
MR. TAZFAZUL AHMED.

## FIRST HALF

*The questions are of equal value.*

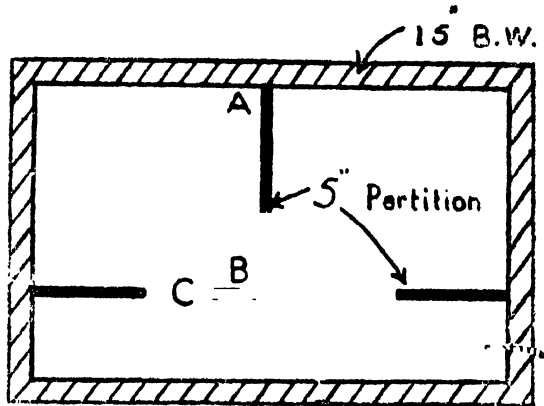
*Only FOUR questions are to be answered.*

1. Sketch any form of steel or timber caisson (crib) known to you for sinking masonry foundations under water. Explain how you will carry out the sinking and state what precautions you will take.



## 2. What is monolithic partition?

A hall is to be divided into two rooms with a passage in front as shown in marginal rough sketch by means of monolithic partitions 5" thick reinforced every alternate course. Sketch three successive courses of the brickwork at 'A' and 'B' showing the bonding and reinforcement.



3. In the above sketch at the opening C a single leaved panel door 7'-0" x 8'-0" is to be fixed. The door is to be 1½" thick with raised panels and planted on mouldings. Give working sketches of the chaukat and the door and show how you will fix the chaukat and finish off the sand plaster of the partition against it.

## 4. What do you understand by steel frame building?

A 15" x 6" R.S. architrave is to be attached to the flange of a B.F. stanchion 11" x 11" and secondary beams 9" x 4" are to be attached to its web. Roughly sketch the connections you will propose.

## 5. What is a basement floor?

Three sides of a basement room are to be in contact with earth. Roughly show the construction you will propose to make the walls and floor damp-proof.

## SECOND HALF

*The questions are of equal value.*

*Questions 5 is compulsory and ANY THREE of the others to be answered.*

1. Give plans and sections of a terrace roof 6" thick, average, over two layers of tiles 1'-6" x 1'-0" x 1" placed on 3" x 3" teakwood burghas supported by R.S. joists 8" x 4" spaced 5 feet apart for a room 20' x 12'. The parapet will be 1'-0" high over roof and 1'-3" thick, the supporting walls of the roof being 1'-8" thick on all sides. The cornice will be of 1'-0" projection and 10½" thick. Describe the method of construction of the roof with details, and show in the section the method of preventing leakage through the joint between the terracing and the brickwork, and show also proper slope for drainage of roof and cornice.

2. Sketch a kingpost truss of wooden scantlings of 15 ft. clear span for a corrugated iron roof and give details of joints at the foot and head of the kingpost and at the junction of tie beam and rafters. Also give details of fixing the truss on the brick walls 1'-3" thick.

3. Describe the method of excavation of a foundation 5 ft. wide and 4 ft. deep in a very loose soil such as slipping clays. If the layer of slipping clays is deeper than four feet, what is to be done for strengthening the foundation of the building, say, two storied high? Describe the methods of such strengthening.

4. Define with sketches : Stringer, Tread, Riser, Style, Lock-rail, Skew arches, Voussoirs, Jambs, String course, Damp proof course, Bedplates, Abutments, Wingwalls, Corbelling, Gradient, and English bond.

5. A 20 feet wide pucca road with six feet kutchas berm on each side with side slopes 2 to 1 is to be constructed along an alignment for 1,000 ft. having the following reduced levels of existing ground starting from 0 at every 100 ft. :—

95'0, 98'0, 100'0, 102'0, 105'0, 107'5, 108'0, 100'5, 96'0, 92'4, and 91'0.  
The formation level of the road is to be 100'0.

Make a longitudinal section of the road and give cross sections at 0, 500, and 900 ft. of the road showing borrow pits, or spoil banks, 6 ft. space from toe or top of slope to edge of borrow pit or spoil bank, metalling 6" thick, double soling, and drains where necessary.

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## I.E. EXAMINATION

## ESTIMATING

*Examiner—* { MR. P. B. GHOSH, B.Sc., B.E.  
MR. S. K. CHAKRABARTI, B.E.

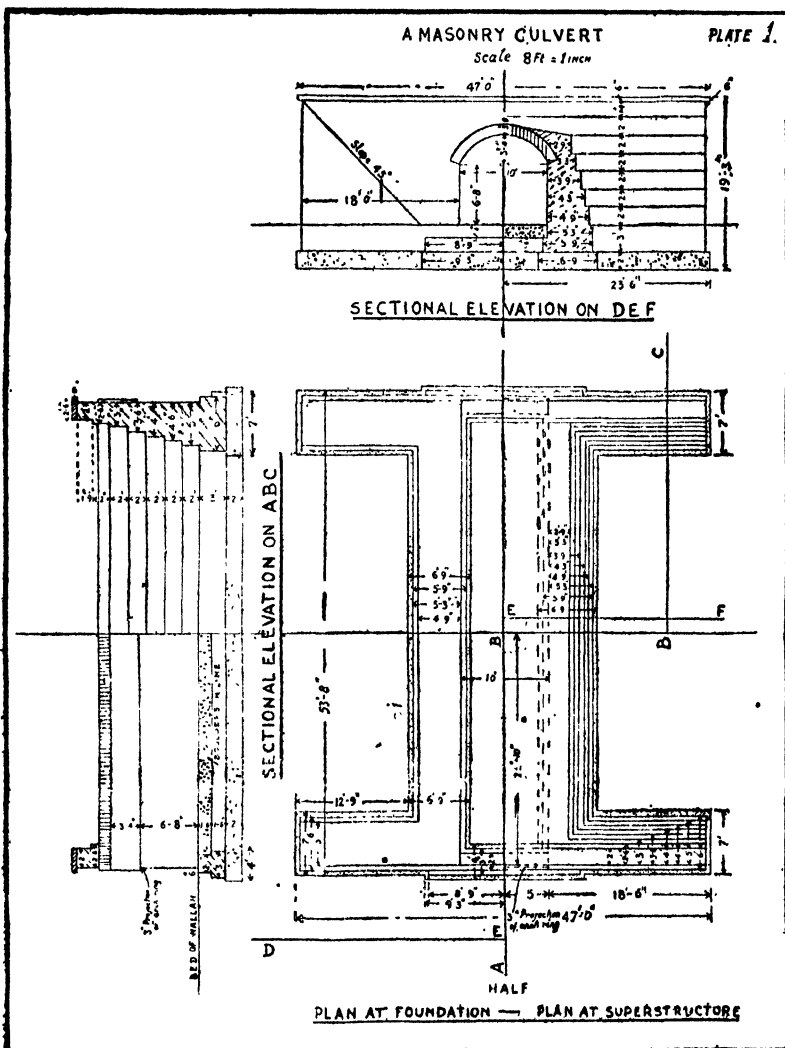
*The figures in the margin indicate full marks*

[N. B.—Dimensions not given in drawings should be scaled off]

## FIRST HALF

1. Calculate the quantities of the following items in the masonry culvert (Plate 1) attached :—

- |                             |    |
|-----------------------------|----|
| (a) Concrete in foundation. | 20 |
| (b) Masonry in lime.        | 55 |
| (c) Archmasonry.            | 15 |
| (d) Boulders in lime.       | 10 |



Or,

From the cross-section of a dam given in Plate 2 attached, prepare 100 an indent of quantities for bricks, lime, soorkee, cement, sand, ballast required for the construction of a reservoir. The internal dimension of the reservoir is 20' x 16'.

The following proportions may be assumed :—

Lime concrete	...	1 : 2 : 5.
Cement concrete	...	1 : 2 : 4.
Cement and lime mortar	...	1 : 2.

Or,

(a) From the sketches shown in Plate 3 attached, estimate the weight of cast iron in the—

(i) Bracket (Fig. 1).	40
(ii) Casting (Fig. 2)	20
(iii) Casting (Fig 3)	20

Wt. of cast iron = 0.26 lb. per cub. inch.

(b) Estimate the cost of making 100 brackets such as shown in Fig. 1, Plate 3 attached. 20

## SECOND HALF

1. (a) From the attached drawing (Plate 4) of a reinforced concrete ground reservoir for a water supply scheme, find out the quantities of the following items :—

- (1) Brick soling ;
  - (2) Cement concrete in foundation ;
  - (3) Cement concrete in reinforced concrete walls and roof ;
  - (4)  $\frac{1}{2}$ " cement plaster in walls both inside and outside, also in floor and ceiling ;
  - (5) 3" lime terracing on roof of tank.
- (b) Find out the cubic contents of the reservoir in gallons. 25

Or,

2. (a) From the attached drawing (Plate 5) of mild steel tanks and staging for a water supply scheme, find out quantities of the following items :— 75

- (1) Mild steel work in cwts. in the angles of the staging.
  - (2) Mild steel work in cwts. in plates of the tanks,
- (b) Find out the capacity of the overhead tanks in gallons. 25





## SURVEYING

Examiners—{ PROF. C. V. MILLER, A.C.G.I., B.Sc., A.M.I.  
STRUCT E.  
RAI BAHADUR G. C. DAS.

*The questions are of equal value*

*No more than FOUR questions need be attempted from each half*

## FIRST HALF

1. Distinguish between "compensating" and "cumulative" errors in chaining.

A field was measured with a 100 ft. chain that was 0.34 of a link too long. The area thus found was 77 acres. What is the true area?

2. Two points  $A$  and  $D$  are connected by a traverse survey  $ABCD$  and the following records are obtained.  $AB=118$  feet  $BC=166$  feet.  $CD=192$  feet. Angle  $ABC=128^{\circ}35'$ , angle  $BCD=57^{\circ}0'$ . Assuming that the whole circle bearing of  $AB$  is  $183^{\circ}30'$ , determine—

- (i) the latitude and departure of  $D$  relatively to  $A$ ;
- (ii) the length  $AD$ ;
- (iii) the angle  $BAD$

3. A series of offsets were measured from a straight line to a river bank at the intervals given below. Find (using Simpson's rule) the area in square feet between the line and the river bank. All the measurements are in feet.

Offsets :—0, 7, 9, 8, 5, 2, 3, 7, 9, 11, 15, 20, 13, 5, 0.

Distances along line :—0, 100, 200, 300, 400, 450, 500, 600, 700, 725, 750, 775, 800, 900, 1000.

4. In taking soundings from a boat, its position is fixed by observations taken to three stations  $A$ ,  $B$  and  $C$  on the shore. The lines  $AB$  and  $BC$  have been measured by the following traverse:  $A$  to  $B$ , 542 feet bearing  $70^{\circ}14'$ ;  $B$  to  $C$  714 feet bearing  $110^{\circ}33'$ . From the boat in a certain position  $P$ , the angles  $APB$  and  $BPC$  were read as  $32^{\circ}16'$  and  $44^{\circ}21'$  respectively. Determine the distances  $AP$ ,  $BP$ , and  $CP$ .

5. The base of a roadway cutting is 32 feet in width, the depth of formation level is 34 feet below the centre line of the roadway the side slopes are  $1\frac{1}{2}$  to 1, and the surface of the ground falls in 8. Calculate the half breadths for the cutting. At a distance of 1 chain in along the centre line the depth of formation level is 28 feet, and at a distance of 2 chains it is 20 feet. Find the volume of earth work to be removed.

6. A pocket sextant is set to zero reading, but the instrument is not in perfect adjustment. Describe the relative positions of an object and its image as seen through the sextant. Show by a sketch the paths of the rays and the mirrors which reflect the object seen. How would you adjust the sextant?

## SECOND HALF

1. (a) Describe with sketches any of the three kinds of level you have actually used. What are their respective advantages?

(b) Describe the adjustment of a level so that the bulb remains in the centre of its run in every position of the telescope

2. The following are the readings of a level, show how to complete the level book (1) by "Rise and Fall" system, (2) by the "collimation method." What are the advantages and disadvantages of the two systems?

Back sight.	Inter sight.	Fore sight.
4'16		
3'57		0'28
	1'16	
0'02		2'98
		4 06

The R. L. of the last reading is 144'99.

3. Draw up a complete indent for articles and instruments required for a detailed road project about 20 miles long in an undeveloped country. What should be the approximate cost per mile?

4. Give a sketch of the top of the stand showing the arrangement for adjusting the theodolite bodily over any desired point.

5. Explain how you would lay out, by an ordinary theodolite, an exact straight line about 6 miles long. What are the precautions you would take, as your work progresses to see that you are laying a perfect straight line?

6. What is the usual formula for calculating the tangents of a curve? Explain what you mean by a 2° curve in a railway line. How would you lay it when the point of intersection is inaccessible? What is the radius of a 10° curve? How do you arrive at it?

### DRAWING

Examiners—  
 { MR. T. A. GARLAND.  
 { RAI SAHEB A. K. MITRA.  
 { MR. P. B. GHOSH, B.Sc., B.E.  
 { MR. C. R. COMPELAND, A.M.I.E.

### FIRST HALF

*The figures in the margin indicate full marks.*

1. Using a scale of four feet to an inch, make a dimensioned drawing showing a part outside elevation and part sectional elevation on ABCD of the building shown in Plate 1, attached. 120

Use your own judgment in proportioning those parts not shown, or not dimensioned in the plate.

2. (a) Draw a dimensioned plan and elevation of one turn of a spiral staircase suitable for a dwelling house. 30

Or,

(b) By means of neat dimensioned sketches, drawn to scale, show the details of construction of any form of stairway and handrail with which you are familiar.

### SECOND HALF

*The figures in the margin indicate full marks*

[NOTE.—Question 4 must be attempted, but one only of Questions 1, 2, and 3 need be done.]

1. Explain briefly the following:— 50

(a) Why a belt pulley is "crowned," i.e., made convex on the face.

(b) The effect of too much curvature, and illustrate by means of a sectional sketch of rim and belt.

Or,

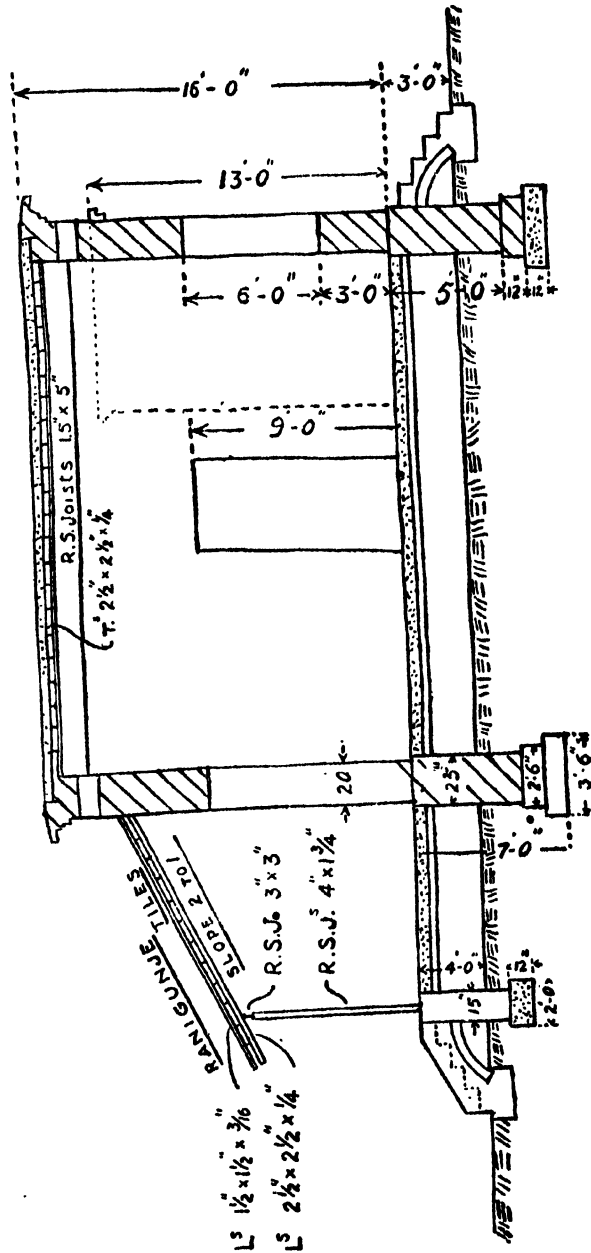
2. (a) Name four different means of obtaining a "Mechanical advantage." 50





# PLATE I

— CROSS SECTION ON X-Y-Z —





# B. E. Examination, 1931

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## MATHEMATICS

*Examiners*— $\left\{ \begin{array}{l} \text{MR. J. M. BOSE, M.A., B.Sc.} \\ \text{PROF. N. C. GHOSH, M.A.} \end{array} \right.$

(THEORIES)

*To attempt SIX questions only, THREE from each half.*

*The questions are of equal value.*

### FIRST HALF

1. When is a series said to be (i) convergent, (ii) divergent, or (iii) semi-convergent? Illustrate your answers with simple examples.

Test any two of the following series as to convergency :—

$$(a) \quad 1 + \frac{1}{2^2} + \frac{1}{3^2} + \frac{1}{4^2} + \frac{1}{5^2} + \dots$$

$$(b) \quad \frac{1}{2} + \frac{2}{3} + \frac{3}{4} + \dots + \frac{n}{n+1} + \dots$$

$$(c) \quad \frac{1}{m} + \frac{1}{m+1} + \frac{1}{m+2} + \frac{1}{m+3} + \dots$$

where  $m$  is any number  $< 0$ .

For which values of  $x$  is the following series convergent?

$$x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \frac{x^5}{5} - \frac{x^6}{6} + \dots$$

2. Explain how determinants are of use in the solution of a system of linear equations.

Examine if the following equations are consistent if so, find the values of  $x, y, z$  which satisfy them all.

$$4x - 3y + 2z = 4.$$

$$x + 7y - 5z = 0.$$

$$3(x + y) - 4z + 3 = 0.$$

$$2(x - 1) - 3(y - 3) + \frac{1}{2}(z - 9) = 0.$$

3. Enunciate and prove De Moivre's theorem for a positive integral exponent.

Find the value of  $(2 \cos 40^\circ + 3 \sqrt{-1} \sin 40^\circ)^6$  in the form  $A + iB$ , expressing  $A$  and  $B$  numerically correct to three decimal places.

4. State the exponential values of  $\sin x$  and  $\cos x$ . Starting with these values as definitions for  $\sin z$  and  $\cos x$ , prove that for all values of  $x$ , real or imaginary,

$$(i) \sin^2 x + \cos^2 x = 1;$$

$$(ii) \cos^2 x - \sin^2 x = \cos 2x.$$

Express  $\cos(\alpha + i\beta)$  where  $\alpha$  and  $\beta$  are real, in the form  $A + iB$  ( $A$  and  $B$  being real).

5. (i) If  $u = x^y f\left(\frac{y}{x}\right)$ , prove that  $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} = nu$ .

(ii) If  $v = \tan^{-1} \frac{x+y}{r}$ , where  $r^2 = x^2 + y^2$ , find the values of  $\frac{\partial v}{\partial x}$ ,  $\frac{\partial v}{\partial y}$ , and verify that  $x \frac{\partial v}{\partial x} + y \frac{\partial v}{\partial y} = 0$ .

### SECOND HALF

1. Prove that

$$f(D)X e^{ax} = e^{ax} f(D+a)X,$$

where  $X$  is a function of  $x$  and  $D = \frac{d}{dx}$ .

Show how to find

$$\frac{\sin px}{aD^2 + bD + c}$$

where  $p, a, b, c$  are constants.

2. A condenser of capacity  $C$  is discharged through a circuit of self-induction  $L$ . Establish the differential equation of discharge and integrate the equation.

If the above circuit forms the primary of a transformer, establish the differential equations for currents developed in both circuits, the mutual induction being  $M$ .

3. Integrate the following :—

$$(1) (xy + x^2) \frac{dy}{dx} = \sqrt{1 - y^2}.$$

$$(2) \frac{d^2 v}{dr^2} + \frac{1}{r} \frac{dv}{dr} = 0.$$

$$(3) \frac{d^2 y}{dx^2} + x^2 y = ax^2 + b \sin px.$$

4. Establish Fourier's Theorem.

Prove that the bending moment across any section of a freely supported beam with a concentrated load  $W$  at  $x = a$  is given by

$$M = \frac{2Wl}{\pi^2} \left( \sin \frac{\pi a}{2l} \sin \frac{\pi x}{l} + \frac{1}{2^2} \sin \frac{2\pi a}{l} \sin \frac{2\pi x}{l} + \dots \right).$$

Find a series for the deflection at any point.

## MATHEMATICS

## (APPLICATIONS)

Examiners—{ PROF. J. M. BOSE, M.A., B.Sc.  
PROF. N. R. SEN, D.Sc

All questions are of equal value

## FIRST HALF

Not more than FOUR questions to be attempted

1. A particle moves in a straight line under a retardation  $kv^{n+1}$ ,  $v$  being the velocity at any time  $t$ . If it starts when  $t=0$  with a velocity  $V$  show that the space  $s$  described in time  $t$  when the velocity is  $v$  is given by

$$kt = \frac{1}{n} \left( \frac{1}{v^n} - \frac{1}{V^n} \right),$$

$$ks = -\frac{1}{n-1} \left( \frac{1}{v^{n-1}} - \frac{1}{V^{n-1}} \right).$$

2. A train of weight  $W$  lb. is moving at  $V$  feet per second on the level, is pulled with a force  $F$  lb. against a resistance  $R$  lb. Show that as the velocity changes from  $v_0$  to  $v_1$  feet per second the distance in feet described by the train is

$$\frac{W}{g} \int_{v_0}^{v_1} \frac{v dv}{F - R}.$$

If  $W=300$  tons,  $R=2160+15v$ , show that the distance described in slowing down on the level from 45 to 30 miles per hour with the power shut off is about 537 feet.

$$[\log_e 10=2.303].$$

3. Show that the principle of energy is satisfied in the case of a projectile under gravity, the resistance of the air being neglected.

A battle-ship is steaming ahead with a velocity  $V$ . A gun is mounted on the battle-ship so as to point straight backwards, and is set at an angle of elevation  $\alpha$ . If  $v$  is the velocity of projection relative to the gun, show that the range is

$$\frac{2v}{g} \sin \alpha (v \cos \alpha - V),$$

also the angle of elevation for maximum range is

$$\cos^{-1} \left\{ \frac{V + \sqrt{V^2 + 8v^2}}{4v} \right\}.$$

4. Deduce the conditions of equilibrium of a system of coplanar forces acting on a body.

Two heavy beams  $AC, BC$  smoothly hinged together at  $C$  are placed with their ends  $A$  and  $B$  on a rough horizontal plane, the plane of the beams being vertical. Find the conditions that the structure may slip at  $A$  or  $B$ .

5. Discuss the equilibrium of a heavy string on a rough curve in a vertical plane.

A rope passing round a fixed rough vertical circle has a weight of 1,000 lbs. attached to one end and hanging vertically. Find the minimum effort at the other end of the rope which will lift the weight, the angle between the two extreme points of the rope in contact with the circle being  $120^\circ$  and the coefficient of friction between the rope and the circle is  $\cdot 125$ .

[Neglect the weight of the rope.

$$e^{\frac{\pi}{12}} = 1.299.]$$

6. Write short notes on the following :—

- (i) The principle of virtual work.
- (ii) The principle of energy.

## SECOND HALF

*Not more than four questions to be attempted*

1. A rigid body moves parallel to a fixed plane the component velocities of its centre of gravity being  $u$ ,  $v$  and its angular velocity  $\omega$ . Find an expression for its angular momentum and kinetic energy.

Find the kinetic energy of a four wheeled waggon having equal wheels each of mass  $m$  and radius of gyration  $k$ , the mass of the rest being  $M$  and moving with a velocity  $v$ .

2. A body is set in motion by a given couple on a rough ground ( $\mu$ ). Investigate its subsequent motion.

The distance between the front and rear wheels of motor car is 12 feet. The vertical line from the C.G. divides it in the ratio 2 : 1. The height of the centre of gravity is 3 feet and the coefficient of road friction is  $\frac{1}{4}$ . Prove that it cannot have an acceleration more than about  $5\frac{1}{2}$  feet per sec. per sec.

3. Determine the principal axes at the centroid of either a right angle section  $6'' \times 4'' \times \frac{1}{2}''$  or a zed section  $10'' \times 5'' \times 1''$ , showing clearly which is the major axis.

4. A cylindrical boiler having hemispherical ends is filled with water. The diameter is 6 feet and the total length is 15 feet. If the axis is horizontal prove that the total thrust is 5,296 lbs. The weight of one cubic feet of water is 62.5 lbs.

If the thickness of the boiler be neglected in comparison with other dimensions and the internal steam pressure be 100 lbs. per square inch, find the principal stresses at any point.

5. Obtain an expression for the stability of a floating body.

Prove that a circular cylinder floating with its axis horizontal will be in a stable equilibrium if its length exceed the breadth at the water line section.

6. Prove that the fundamental frequency of a beam simply supported at its extremities are given by

$$n_0 = \frac{\pi}{2} \sqrt{\frac{gEI}{wl^4}}.$$

Prove also that the deflection is given by

$$y = A_1 \sin \frac{\pi x}{2} \sin 2\pi n_0 t + A_2 \sin \frac{2\pi x}{l} \sin 8\pi n_0 t + \text{etc. ....}$$

What must be the initial condition which will enable you to determine  $A_1, A_2, \dots$ ?

## TECHNICAL CHEMISTRY AND METALLURGY

## THEORETICAL PAPER

Examiners— { PROF. N. N. SEN, M.Sc. (CAL.), A.I.C.  
 { DR. A. KARIM.

[N. B.—Not more than THREE questions are to be attempted in each half.]

## FIRST HALF

*The questions are of equal value*

1 Write short notes on the following :—

Case hardening; Normalising; Recalescence; Ferromanganese; Phosphor bronze; Ni chrome.

Or,

Give a brief account of the materials and plants necessary for the manufacture of aluminium. State the approximate composition and properties of an aluminium alloy suitable for (a) castings, (b) forgings

2. Portland cement, gypsum cement, and lime being available for use as plastering materials, state the various considerations that may weigh with you in selecting one for any particular purpose to the exclusion of the other two. Discuss the resistance of these materials to the action of (a) rain and river water, (b) sea water, (c) sewage water, (d) frost, and (e) fire.

Or,

Sketch a gas-producer and give the thermochemical reactions that take place during the process of making producer gas. Briefly indicate the special advantages of using gaseous fuel

3. Draw the iron-carbon equilibrium diagram and show what use can be made of this diagram for the proper heat-treatment of various grades of carbon steels.

Or,

Calculate the volume of air in cubic feet theoretically needed for burning one ton of coal analysing: C 71% ; H 5% ; O 7% ; N 2% ; S 1% ; Ash 10% ; Moisture 5% . Also calculate the percentage composition by volume of the products of combustion in the dry condition. [Air contains 23% O by weight and one cubic foot of dry air weighs 0.08 lb. Molecular weight of a gas in ounces occupy 22.4 cu.ft. H=1, C=12, O=16, N=14, S=32.]

1. Name the chief scale-forming impurities that are usually present in boiler water, and give the reactions that are responsible for the formation of scales. Discuss the action of various substances that are used for softening boiler-water. Why are boiler scales objectionable?

## SECOND HALF

*The questions are of equal value*

1. Differentiate, with reference to their compositions and characteristics, the following grades of bricks : (a) Building bricks, (b) Fire bricks, (c) Paving bricks, (d) Glazed bricks, and (e) Lime-sand bricks.

Or,

State, giving your reasons, the type of furnace you would use for carrying out each of the following metallurgical processes : (1) roasting of copper pyrites, (2) extraction of zinc, (3) smelting of iron ore, (4) cupellation of argentiferous lead.



2. Give an account of the principal commercial forms of iron, their methods of production, and their special uses.

Or,

Enumerate the principal classes of fuels and indicate briefly the purposes for which each class is mainly used.

3. Give a brief account of two of the various theories that have been advanced to explain the corrosion of iron and steel. Write what you know regarding the functions of paint as a preventive against corrosion, and state the ingredients that are usually present in a ready-made paint for use on iron or steel structures.

Or,

Classify lubricants according to their uses and discuss the essential properties of each class.

4. Assuming that Red Lead and Litharge have been used on lead grids as chief ingredients for the making of positive and negative plates, respectively, of a lead accumulator cell, give the chemical reactions taking place during the process of (a) forming, (b) discharging, (c) re-charging, (d) sulphating, of the plates.

#### PRACTICAL PAPER

Examiners— { PROF. N. N. SEN, M.Sc.  
DR. A. KARIM.

[N. B.—The number of the solution should be carefully entered in the answer book]

1. Estimate (a) gravimetrically the total sulphate, (b) volumetrically the free sulphuric acid present in the given solution. Express your results as  $\text{SO}_3$ .
2. Submit your practical note-books.

#### GEOLOGY AND MINERALOGY

Examiners— { MR. G. V. HORSER.  
DR. A. M. HERON.

##### FIRST HALF

*The figures in the margin indicate full marks*

1. Enumerate the crystallographic systems and discuss one of these in detail. 33
2. Discuss the question of the stability of hill slopes in general. What particular features would you look for in this connection? Illustrate your answer with sketches. 33
3. Describe with sketches syncline, overlap, joint-plane, reversed fault, unconformity, cleavage. 33
4. A band of limestone is seen to crop out in a river section and to strike E and W. At a point 450 feet due S a borehole penetrated the band at a depth of 62 feet, the top of the borehole being 12 feet higher than the limestone outcrop. 34

At what depth will the limestone be met in a borehole situated 1,000 feet due SW of the first borehole, assuming the two to be at the same datum level?

## SECOND HALF

*The figures in the margin indicate full marks*

THREE questions only to be attempted ONE of which MUST be either 4 or 5.

1. Describe marine erosion. What method would you use, as an engineer, to combat marine erosion? Describe the formation of bars and spits. To what engineering use may they be put when at the mouth of a large estuary? 30
2. Compare the types of vulcanism typified by the Deccan traps and Vesuvius. What industries may be found in some volcanic areas? 30
3. Describe the phenomena accompanying earthquakes. What general principle should guide the erection of buildings in an area subjected to severe earthquakes? 30
4. What are the three main divisions into which rocks are classified? How are they formed in Nature? Describe two rocks used for engineering purposes from each of the three divisions (six in all), noting the properties which make them suitable for that purpose. 40
5. A tunnel is being driven north in rocks striking E-W and dipping 15° to the south. It meets in succession the following rocks: glacial drift (100 feet); massive sandstone (400 feet); slates thickly impregnated with marcassite and alum (700 feet); rubbly and close-jointed basalt (300 feet). What precautions in each would you take for the safety of the tunnel? Which would be the hardest to tunnel through, and why? How would you take advantage of the dip to help you in blasting through the sandstone and slate? 40

## APPLIED PHYSICS

## THEORY PAPER

Examiners— { PROF A. C. CHAKRABARTI, M.Sc.  
 { PROF P. N. GHOSE, M.A., PH.D., Sc.D.

*Only THREE questions to be attempted from each half*

*The questions are of equal value*

## FIRST HALF

1. What device would you adopt for sorting out and measuring accurately the wavelength of the radiations from a mercury vapour lamp?
2. Define Lux and Mean Spherical candle power with reference to a source of illumination. Explain the principle of Ronsseau diagram in ascertaining the m. s. c.p. of a lamp.
3. Explain the use of cathode rays for studying the wave form of high frequency alternating electromotive force.
4. Explain the use of a thermionic valve as—
  - (a) A.C. rectifiers.
  - (b) Wireless detectors.
  - (c) Amplifiers.

## SECOND HALF

1. "X-ray is an atomic phenomenon." Justify this statement.
2. Why is Ammonia regarded as a suitable working substance in a vapour compression refrigerator? Compare the efficiency of a machine working with Ammonia with that of another working with carbon-dioxide.
3. Explain with schematic diagrams the working of an Ice making plant.
4. Describe and explain a method of measuring temperatures higher than 1500°C.

## APPLIED PHYSICS (METROLOGY) PAPER

Examiners— { PROF J. RIFFKIN  
                  { MR. N. COOKE, B Sc.

*The questions are of equal value*

## FIRST HALF

*Attempt THREE questions only from this half.*

1. Explain the terms Bilateral and Unilateral as applied to a system of limits, and indicate the advantages claimed for each method.

In the manufacture of a component the total tolerance is 10 units. How much of this tolerance does the worker really get? Account for the remainder.

2. With the aid of neat sketches, select a representative example to illustrate the use of the following :—

- (i) a sine bar precision block.
- (ii) the Hirth minimeter.

3. You are required to measure accurately a given tapered plug gauge. Describe clearly and concisely (i) the apparatus you would use, (ii) the procedure you would adopt.

Give neat sketches where necessary.

4. Sketch a micrometer depth gauge and show a setting of 0.667 inch. Do not describe the mechanism but insert index letters with a key to show the important details.

Explain how a vernier may be embodied on a micrometer to read to 0.0001 inch.

## SECOND HALF

*Attempt THREE questions only*

1. Make clear sketches of the mechanism of an "Ames" dial gauge. Explain the functions of the various parts, referring to your sketches by index letters. What arrangements are made to eliminate the effects of "backlash?"

2. Describe any process which can be employed for the manufacture of slip gauges.

3. Describe, with the aid of sketches, the ordinary work-shop process for measuring the effective diameter of an outside screw thread, giving the theory of the calculations. What assumptions are made in these calculations, and what errors do they involve?

4. Describe any method by which the radius of a concave radius gauge may be accurately measured. Derive any formula necessary to calculate the result from the observations made.

## APPLIED PHYSICS (METROLOGY) PRACTICAL

Examiners— { PROF. J. RIFFKIN.  
MR. N. COOKE, B.Sc.

*The examiners will detail the particular test or tests you are required to attempt.*

*Submit your results according to the following scheme; give neat sketches where necessary :—*

- (a) Object of the test.
- (b) Apparatus used.
- (c) Procedure adopted.
- (d) Calculations.
- (e) Observations and deductions.

1. Determine the diameters of the two holes in the given rectangular block. Determine also their relative positions with reference to the faced edges of the block and hence find their distance apart.

2. With the aid of the apparatus supplied, measure accurately the given tapered plug gauge at four diameters. Illustrate graphically any variation of the generator from the straight line tangential to the two extreme measured diameters in an axial plane.

3. With the aid of the sine bar precision block supplied determine the angles between the faces of the given quadrangular plate gauge.

4. Determine the radius of the given profile gauge. Is the contour truly circular?

5. Set the five buttons in a circle of 4 inches diameter on the given plate in which there are five approximately located tapped holes. You are not required to locate the centre of the circle.

6. The gauge supplied is a receiver for a machine-gun component. Find the limiting dimensions of the gauge points from the centre lines and other reference faces of the component. A rejected component is supplied, for guidance only.

## ROADS AND RAILWAYS

Examiners— { MR. K. P. MODWEL, B.Sc.  
MR J. N. DASGUPTA.

## FIRST HALF

*The questions are of equal value.*

*ANY FOUR questions carry full marks.*

1. What are the different kinds of sleepers in use in India? Describe merits and demerits of each kind.

*What is the right way for laying treated wooden sleepers in the tract?*

2. What are the different classes of Surveys for a Project?

*If you are out on a reconnaissance survey, on what points would you make notes in the field?*

3. What are the chief resistances which a train in motion has got to encounter and how are they calculated?

*If the ruling gradient is 1 in 75 find the compensation for curvature for a 3 degree curve (a) for broad gauge, (b) for metre gauge.*

4. (a) What are the advantages of electrifying railways for suburban traffic?

(b) Draw a dimensioned sketch of a simple wayside station yard showing how isolation of the loop and a goods siding is secured.

5. Explain broadly what are the various methods adopted for renewing girders or rebuilding Railway bridges under traffic.

6. What points would you bear in mind when designing a large sectional yard? What factors would govern the length of reception, sorting and marshalling sidings?

## SECOND HALF

*The figures in the margin indicate full marks.*

*FOUR questions only need be attempted.*

1. (a) What is a "Ruling Gradient?" What are the points to be considered in fixing it for a road? State briefly the effects of gradient on a road. What is the maximum gradient desirable on any metalled road intended for wheel traffic? 50

(b) What is "Camber" in a road and with what object is it provided? What are the objections to an excessive camber on a road?

2. Describe, in detail, the method of laying and consolidating a waterbound macadam road surface, with sketches if necessary. State briefly what are the chief causes of failure of waterbound roads. 50

3. What requirements would you expect from an Ideal Road Pavement? 50

Sketch, with dimensions, plan and sections of a Reinforced Concrete Road you may have visited, with short notes on the method of its construction.

4. What are the different methods of paving footwalks in Calcutta Roads? Describe the method of laying one of them, noting its advantages or disadvantages. 5

5. Show by sketches the usual cross sections of—

(a) First class trunk road or highway,

(b) A hill-road 20 ft. wide suitable for ordinary traffic.

Give general details of arrangement for drainage.

6. Show by a rough sketch the plan and sections of an ordinary type of road masonry arch culvert. 10 ft. span for a road with 20 ft. crest, and 12 ft. height of bank, in the plains like Bengal. 50

## IRRIGATION AND SANITARY ENGINEERING

### FIRST HALF

Examiners— { RAI BAHADUR A. N. DAS, B.E.  
                  { MR. F. C. GRIFFIN.

*The figures in the margin indicate full marks.*

*Only FIVE questions should be attempted from the First Half Paper.*

1. What are the different factors for consideration in determining the section and bed slope of an irrigation canal? 40

2. Give a rough sketch of the section of a weir wall of the Indian type. How do they fail? 40

- |  |    |
|--|----|
| 3. Give a rough sketch of a lock for a navigation canal.   | 40 |
| 4. How are tides generated and propagated in a river and what are the factors which influence their range? | 40 |
| 5. How is the section of a flood embankment determined?  | 40 |
| 6. Give a rough sketch of a drainage sluice.   | 40 |

### SECOND HALF

*The figures in the margin indicate full marks.*

*THREE questions only to be attempted.*

- |   |    |
|---|----|
| 1. Explain the following terms, with sketches where necessary :—<br>Cone of depression, water seal, aqua privy, artesian well, infiltration gallery, back drop, shrouding, boning rod.  | 80 |
| 2. Compare the relative advantages and disadvantages of a mechanical filter and a slow sand filter, stating their usual rates of filtration. Describe by means of a sketch the construction and action of a slow sand filter, explaining what is meant by "filtration head."  | 60 |
| 3. You are directed to design a surface drainage scheme for a small town. How would you go about it, and what are the principles involved? What is "run-off," and how is it estimated? What should be the discharging capacity of a drain serving a built up area of 135 acres in a town in Lower Bengal? Sketch its cross section. | 60 |
| 4. In a modern sewage works, the sewage is separated at an early stage into (a) tank effluent, and (b) sludge, by means of settling or sedimentation tanks. Describe with sketches the different methods available for the disposal of both (a) and (b).  | 60 |

### APPLIED MECHANICS

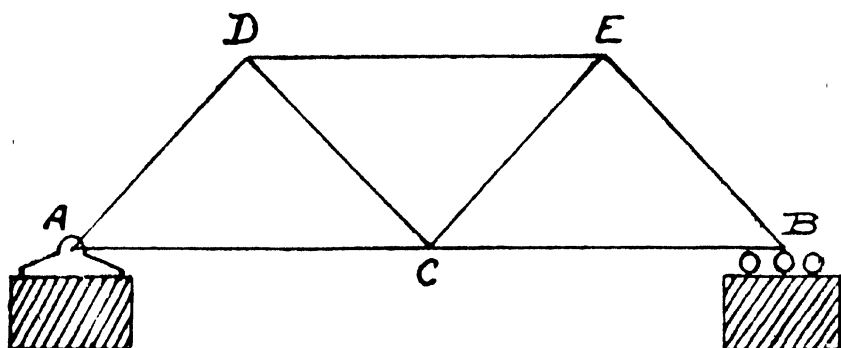
*Examiners—* { PROF. C. V. MILLER, A.C.G.I.  
MR. J. CHAMBER, B.Sc., A.M.I.C.E.

### FIRST HALF

*The questions are of equal value.*

*Only FOUR questions need be attempted.*

1. A 14" x 14" reinforced concrete pile, 50 feet in length, is to be slung in a horizontal position by two chains. Calculate the positions of the slings from the ends of the pile so that the maximum bending moment on it is the least possible.
2. A uniform rolled steel joist of 50 feet span, simply supported at the ends, carries a load which increases uniformly from  $\frac{1}{2}$  ton per foot run at the left hand support to 8 tons per foot run at the right hand support. Find (i) the position and magnitude of the maximum bending moment, (ii) the slope, and (iii) the deflection of the girder at a point 20 feet from the left hand support. Take E as 12,400 tons per square inch and I about the neutral axis as 1,777 inch units.
3. The plate girders of a bridge of 80 feet clear span (effective span 84 feet) are placed 8'-0" centre to centre. The depth of each girder is 7'-6". Design a suitable end sway frame for a wind pressure of 40 lbs per square foot when a train is on the bridge. An allowance for racking forces of 40 lbs. per foot run must be made in addition to the wind pressure.
4. If the areas and lengths of the members comprising the framed girder shown in Figure 1 are as given in the table, find the true deflection of C in magnitude and direction when the end A is fixed and the end B is supported on rollers which allow B free motion laterally.

**Fig. 1**

Member.	Area in square inches	Length in feet.
AD	0.5	7
DE	1.0	10
EB	0.5	7
BC	1.5	10
CA	1.5	10
EC	2.0	7
DC	2.0	7

5. A two tier grillage foundation has to carry a load of 140 tons. The steel column base is 40 inches square. If the safe load on the ground is 1 ton per square foot, find the sizes and number of rolled steel joists in each tier and draw dimensioned sketches of the foundation.

Size in inches.	Area in square inches.	$I_x$ .	$I_y$ .
15" x 5"	12.35	428.21	11.94
14" x 6"	13.63	440.62	21.58
12" x 6"	14.99	365.01	27.14
10 x 5	8.38	142.00	9.50
8 x 5	7.80	87.00	9.88
7 x 4	4.71	39.22	3.41
6 x 3	3.53	20.23	1.34
5 x 3	3.21	13.62	1.46
4 x 3	2.79	7.52	1.28

6. The portal bracing of a lattice girder bridge is shown in Figure 2. If a load of 12 tons acts horizontally on the joint  $E$ , find the force in magnitude and kind that acts in member  $CD$  when the feet  $A$  and  $B$  of the bracing are assumed (1) jointed, (2) fixed.

Take  $y = \frac{d}{2} \left( \frac{d + 2h}{2d + h} \right)$ , where  $y$  is distance in feet of the point of contraflexure from the foot of the bracing for the case when it applies, and  $d$  and  $h$





## SECOND HALF

*The figures in the margin indicate full marks.*

*Questions 1 and 2 compulsory.*

*Only FOUR questions to be attempted.*

1. A reinforced concrete column  $20'' \times 28''$  rigidly fixed at the bottom carries— 50

(a) a direct load of 5 tons,  
and (b) is subjected to a bending moment of 60 ft. tons.

Assuming—

Weight of reinforced concrete = 150 lbs. /c. ft.,

Weight of earth = 120 lbs. /c. ft.,

Depth of foundation below ground level = 4 ft.,

design a reinforced concrete footing so that the maximum intensity of pressure does not exceed 1.25 tons/sq. ft.

Stress in steel not to exceed ... 16,000 lbs./ $\square''$

Compressive stress in concrete ... 600 lbs./ $\square''$

Shear stress in concrete ... 60 lbs./ $\square''$

2. ACDEB is a continuous beam of 4 spans. AC = 50 ft.; CD = 30 ft.; DE = 20 ft.; EB = 40 ft. 50

(a) Spans AC and DE are loaded with a uniform load of 1 ton per ft. run, spans CD and EB are loaded with a uniform load of 2 tons per ft. run. Draw bending moment and shearing force diagrams. State maximum values.

(b) Spans AC and DE loaded as in (a) but spans CD and EB unloaded. Draw bending moment and shearing force diagrams. State maximum values.

3. A parabolic arched rib has a span of 50 ft. and a rise in the centre of 10 ft.; it is hinged at the centre and at the springings and carries a uniform load of 0.6 ton per foot run over the right half of the span. Determine the normal thrust and the shearing force at each of the three hinges, and also the bending moments at points midway, measured horizontally, between the springings and the centre. 50

What is the bending moment when the complete span carries a uniform load of 0.6 ton per ft. run?

4. (a) A stanchion fixed at both ends is acted upon by a couple  $\mu$  at point C distant  $nL$  from one end; derive an expression for the bending moment at the ends and draw bending moment diagrams for the following cases:— 50

(1)  $n = \frac{1}{2}$ , (2)  $n = 0.211$ .

(b) Find the load which will cause an extreme compressive stress of 21 tons per sq. inch in a stanchion whose external area is 53.52 sq. ins., least radius of gyration 4.5 inches, length 12 ft., and freely hinged at the ends, if the depth of the section in the direction of the least radius of gyration is 16 ins., and the deviation of the load from the centre of the cross section is 1 inch in the direction of the 16 inch depth.  $E = 13,000$  tons per sq. inch.

5. A retaining wall, trapezoidal in cross section, 24 ft. high and 8 ft. wide at the base, has a vertical face and a batter of 1 in 12 at the back. Find, according to Rankine's rule, how far from the centre of the base the resultant thrust passes for horizontal filling to the level of the top of the wall, if the angle of repose is  $45^\circ$ , weights of earth filling 120 lbs., masonry 150 lbs. per cubic ft. Assuming uniformly varying intensity of stress in each case, find the extreme values of the normal unit stress across the base of the wall. 50

6. A reinforced concrete beam of T shape has the following dimensions :—

Breadth of flange 10 inches; thickness of flange 4 ins.; depth of web 18 ins.; thickness of web 10 ins.

The reinforcement consists of six  $\frac{3}{4}$ " round steel bars, placed with their centres 3 inches from the bottom edge of the web.

If the working stress in the concrete is not to exceed 600 lbs./sq. in., and if the value of Young's modulus for steel is 15 times that for concrete, determine the load per ft. run this beam could support on a 3 ft. span.

Discuss the validity of any assumptions you make; describe the precautions which have to be adopted in making such a beam, and state what other reinforcement you would consider desirable.

## HYDRAULICS

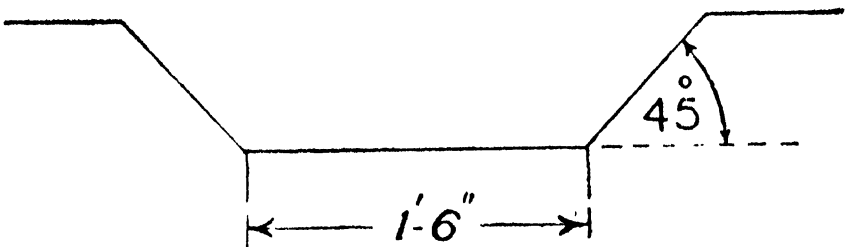
Examiners— { PROF. C. V. MILLER, A.C.G.I.  
 { MR. BANKILAL SUBERVAL, B.Sc.

*The questions are of equal value.*

*Four questions only need be attempted from EACH half.*

### FIRST HALF

1. Find the quantity of water that will flow over the notch shown in the figure when the head over the sill is 3 inches.



2. State in general terms the pressure produced by a jet of water acting on a bucket of a Pelton wheel, and show that the efficiency of a Pelton wheel is a maximum, neglecting frictional losses, when the velocity of the cups equals half the velocity of the jet. Determine the horse power developed in such a wheel when 14 cubic feet of water per second flows through a nozzle of 12 square inches, the efficiency being taken as 77%.

3. A pump working 8 hours per day has to lift water from a well and deliver it into an overhead service reservoir. The level of the water in the well is 23 feet below the level of the centre of the pump, and the mouth of the inlet pipe into the service reservoir is 140 feet above the centre of the pump. The quantity of water to be lifted per diem is 500,000 gallons. Assuming that the velocity of flow in the delivery pipe is not to exceed 5 feet per second and that the length of the delivery pipe is 380 feet, determine a suitable diameter for the delivery pipe.

Neglecting all losses in the suction pipe and taking the coefficient of resistance of flow in the delivery pipe as 0.008, determine the pump horse power, and estimate the probable indicated horse power of the engine.

4. In an outward flow reaction turbine the wheel has an internal radius of  $2\frac{1}{2}$  feet and an external radius of  $3\frac{1}{2}$  feet and it makes 275 revs. per minute. The wheel is 9 inches wide at the inlet and outlet, and the net areas for radial flow at inlet and outlet are each 0.8 of the gross area. The head of water is 140 feet. Neglecting all frictional losses, determine the angles of the tips of the vanes at inlet and outlet so that the water shall leave radially. The quantity of water supplied is 230 cubic feet per second.

5. Three reservoirs A, B, and C are connected by pipes leading from each to a junction box P. The lengths of the pipes AP, BP and CP are 7,000 feet, 3,000 feet, and 5,000 feet and their diameters are 18 inches, 12 inches and 24 inches respectively. The water levels at B and C are 500 feet and 300 feet respectively below the water level of A. Calculate the magnitude and indicate the direction of the velocity in each pipe, taking the coefficient of friction in each pipe as 0.01.

6. A centrifugal pump has a wheel 28 inches diameter. The vanes of the wheel are radial at exit and it makes 500 revs. per minute. If the radial velocity of the flow is 9 ft. per second and the loss of head in the pump is  $\frac{3}{4}$  of the velocity head at the exit from the wheel, find the height to which the pump will deliver water, and the efficiency of the pump.

## SECOND HALF

*Four questions only need be attempted from this half.*

1. (a) Deduce the formula for the discharge of sluices  $Q=5A\sqrt{h}$  and state how the formula must be varied if the contraction be suppressed along part of the perimeter of the orifice

(b) What would be the discharge per minute under a constant head of 6' from—

- (i) a square orifice of 1 sq. inch Sectional Area in a thin plate;
- (ii) a cylindrical jetutage 1" in diameter and 3" long?

2. Prove Bernoulli's theorem and explain the cause of a high discharge through an adjutage by its application.

3. (a) Explain the terms 'head of approach,' 'velocity of approach' and state how the expression for discharge through a rectangular notch is modified by the velocity of approach.

(b) What will be the discharge per minute through a rectangular notch in a thin plate 6' wide with 8" head, velocity of approach being two miles per hour?

4. (a) What do you understand by the terms 'Anicut,' 'Waste Wier,' and 'Regulator?' Explain how these devices are made use of in irrigation works. Give the formula for discharge over a wier (freefall).

(b) A wier has a head of 4' of water on its crest and the tail-water rises 3' above the crest. Find the discharge for each foot run of the wier.

5. (a) A tank has a catchment area of 30 sq. miles. What length of wier will it require to carry off with a head of 4' a rainfall of 5" in 24 hours, 60% of which reaches the tank?

(b) A river 300' feet wide with vertical banks 8' deep has a mean velocity of 8' per sec. At what height above an anicut with a clear overfall would the wheel be discharged?

6. (a) Deduce the formula for discharge in open channels.

(b) A main canal is to have a discharge of 5,000 cusecs with a velocity of 2' per sec. and a depth of 5'. The side slopes are 1:1. Find the bottom width of the channel and the slope.

7. (a) What do you understand by the term 'catchment basin' of a river? How is it determined? State briefly two independent methods of ascertaining the flood discharge of a river at given point.

(b) The catchment basin of a river above a given point in its course is 200 sq. miles. The maximum recorded rainfall at a meteorological station in the vicinity is 6" in 24 hours. Estimate the probable maximum discharge of the river at the given point.

## MECHANICAL ENGINEERING

Examiners—{ PROF. J. RIFFKIN  
                  { MR. N. COOKE, B.Sc.

*The questions are of equal value*

*Attempt THREE questions only from EACH half*

### FIRST HALF

1. The flanges of an I girder are 12 ins. by 1 in. and the web is 24 ins. by  $\frac{1}{2}$  in. At a particular section the B.M. is 100 tons feet and the S.F. is 50 tons. Consider a point in the section at the top of the web and calculate the principal stresses. If the elastic limit tensile stress is 14 tons/in.<sup>2</sup> and Poisson's ratio is 0.3, determine the factor of safety according to each of the three recognised theories of elastic failure.

2. A cylinder of 4 ins. internal diameter is to sustain an internal pressure of 2 tons/in.<sup>2</sup>. The cylinder is fitted with plungers which take the end thrust so that the cylinder wall is unstressed longitudinally. If the maximum shear stress is not to exceed 3 tons/in.<sup>2</sup>, find the minimum outside diameter.

Deduce the Lamé the equations.

3. Discuss the effect of repeated loading beyond the yield point on a ductile material such as mild steel.

State briefly the effects of time and low heat treatment of the specimen on its elasticity.

4. A cast-iron column, 6 ins. internal diameter, 8 ins. external diameter, and 20 feet long, was inadvertently cast with an eccentric section, the minimum thickness being 0.9 inch. The line of load is along an axis through the centre of the outside circle of the section. If both ends are fixed and the load is 48 tons, find the maximum and minimum stresses produced.  $E=8,000$  tons/in.<sup>2</sup>

### SECOND HALF

*Attempt THREE questions only.*

1. A two-plate friction clutch consists of two "Ferodo" discs 8" outside diameter and 4" inside diameter, engaging with corresponding steel discs on one surface of each. If the coefficient of friction of "Ferodo" on steel is 0.35, determine the spring pressure necessary to transmit 20 H.P. at 2,500 r.p.m. State any assumptions made.

2. The following particulars are taken from a steam engine :—

R.p.m.—150.

Length of conn. rod—4'-6".

Length of stroke—24"

Dia. of cylinder—16".

Weight of reciprocating parts—400 lbs.

When the crank is at an angle of 30° from the inner dead centre, the net steam pressure on the piston is 85 lb./in.<sup>2</sup>

Determine, for this position of the crank, the thrust along the connecting rod, the turning moment of the crankshaft, and the rate at which work is being done on the crankshaft.

3. The ram of a stone-breaker is driven by a crank and connecting rod mechanism. The stone is crushed as the ram descends to the bottom of the stroke. The lengths of the crank and connecting rod are 8" and 24" respectively. The diameters of the coupling pins are 4", and that of the crankshaft is 5". The speed of the crankshaft is 30 r.p.m., and it is fitted with a heavy flywheel. When the ram is at the bottom of the stroke, the load on the pin joining it to the connecting rod is 15 tons. Calculate the frictional torque on the crankshaft, given that  $\mu = .15$  for the pins and journals.

4. Given the turning moment diagram of an engine, derive a formula to find the size of flywheel required for any given permissible cyclical variation of speed. A compound steam engine develops 400 I.H.P. at 90 r.p.m., and from the turning moment diagram it is found that in one revolution the fluctuation of energy is 20% of the energy developed. Find the moment of inertia of a flywheel to keep the fluctuation of speed within  $\pm 1\%$ .

## ELECTRICAL ENGINEERING

Examiners— { PROF. B. C. GUPTA, F.H.I.E.E.  
                          { MR. S. W. REDCLIF.

*The questions are of equal value.*

### FIRST HALF

*Answer FOUR questions only.*

1. (i) What are the methods employed for ventilating alternators? (ii) Describe with a sketch one type of rotating field for a high speed turbo-driven alternator. (iii) What are the advantages and disadvantages of the (a) salient pole type, (b) flush pole type? Where are the different types usually applied?

2. (i) A resistance of 5 ohms, an inductive reactance of 6 ohms, and a condensive reactance of 12 ohms are connected in parallel across 120 volts, 60 cycle mains. Find (a) the current, (b) determine the circuit power factor, (c) determine the power, (d) show the currents vectorially.

(ii) Give the equation for impedance when the resistance and inductance are in parallel.

3. Describe, with sketches, a simple telephone circuit, with 2 magneto telephone instruments, explaining, in their sequence, the different operations that take place, when the two parties wish to converse with one another.

4. (i) What do you understand by writing telegraphy? Describe with sketches a writing telegraph apparatus. (ii) What is a telegraph relay? Explain fully.

(iii) What type of battery do you use for an outlying telegraph office? (iv) What is meant by a polarised mechanism? Explain fully its use in telegraphy.

5. What is the principle of working of (a) constant current transformer, (b) mercury arc rectifier? Under what circumstances are the two apparatus made to help one another?

## SECOND HALF

*Answer FOUR questions only.*

1. Make a sketch of a system of lighting conductors for a college building 80 feet high, 160 feet long, and 20 feet wide, and indicate on the sketch the articles used.

Explain, with sketches, a type of suitable "earth" connection and show on the plan where they would be placed.

If you were to test such an installation, what would you pass as satisfactory?

2. Make a hand drawing, roughly to scale, of the section through a 50 B.H.P. 440 volt D.C. motor.

Name the different materials used. How are the bearings lubricated and what means are provided to prevent the oil gaining access to the internal parts of the motor?

3. What is an electric accumulator and how does it differ from a primary cell?

Why is it necessary to describe the capacity of a secondary battery as 'x' ampere hours at 'y' hour rating?

If an accumulator has a capacity of 400 amp. hours at 10 hour rating, what maximum charging current could be applied, and why?

Enumerate the usual defects met with in accumulators and state how they can be avoided or remedied.

4. A 500 volt 10 B.H.P. motor with an efficiency of 87% has to be reduced in speed 25% by means of a resistance in the armature circuit, the torque remaining as before. Find the resistance required.

5. A 25 c.p. Tantalum lamp takes 1.8 watts per c.p. and costs Rs. 2. A 25 c.p. carbon lamp takes 4 watts per c.p. and costs annas 8. How long must these lamps burn before the Tantalum lamp becomes the more economical source of light? Electrical energy costs 3.5 annas per unit.

## PRINCIPLES OF ARCHITECTURAL DESIGN

## FIRST HALF

Examiners— { MR. P. B. GHOSH, B.Sc., B.E.  
                  ,, M. T. EDMONDSON.

*The figures in the margin indicate full marks.*

1. Draw the plan, elevation, and section of a Triumphal Arch as was erected by the Romans to an emperor or a general in honour of his victory to a scale of 8 ft. to an inch. 70

*Or,*

Draw, to a suitable scale, the plan and front elevation of a Greek temple with four columns in the front portico showing all details in the entablature.

2. Give such sketches and notes as are necessary to show the changes in the principle of construction of vaults as built in the Roman, Romanesque, and Gothic periods. 30

Or,

(a) In planning a building on an open site, state the general rules that should be observed in arranging the various rooms.

(b) How would you arrive at the working space and size of (i) a class room, (ii) a hostel room, in a High School in Bengal?

## SECOND HALF

*The figures in the margin indicate full marks.*

Design a Garden Pavillion, consisting of a room approx. 15' x 30' in the centre, open on the two long sides with small rooms approx. 15' square at each end suitable for storing garden tools and accessories.

The Greek Ionic Order or the Roman Doric Order should be made use of in the design; the roof may be of the flat concrete type or sloping tile roof type.

The most suitable position for the north point should be indicated on the plan.

The following drawings to a scale of 1"=1'-0" should be attempted by the candidate :—

(1) Plan.

20

(2) Side Elevation.

55

(3) Cross Section.

25

Only one half of each drawing need be completed in detail.

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